AUSTRALIAN Wildlife

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Celebrating a new century of wildlife preservation in Australia

Journal of the Wildlife Preservation Society of Australia Limited
(Founded 1909)

Southern hairy-nosed wombat (*Lasiorhinus latifrons*) at Moorunde Wildlife Reserve, a 70 square kilometre reserve near Blanchetown in South Australia, owned and maintained by The Natural History Society of South Australia (www.nathist.on.net). Moorunde was set up in 1968 by donations from people wanting to save wombats that were starving due to a major drought at the time. Photos: Brett Smith, Fellow & Treasurer, Natural History Society of South Australia

A wombat outside its warren

The same wombat fleeing back to its warren after being startled by the photographer

Another wombat warming up in the sun by its warren during the drought

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A southern hairy-nosed wombat (*Lasiorhinus latifrons*) being harassed by a fly. Photos: Glen Taylor OAM, Fellow & Reserves Manager, Natural History Society of South Australia

WILDLIFE PRESERVATION SOCIETY AUSTRALIA

Celebrating a new century of wildlife preservation in Australia

Australian Wildlife

is the official journal of the Wildlife Preservation Society of Australia Limited.
Founded in 1909, the Society is dedicated to the conservation of our unique Australian wildlife in all its forms.

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Directors 2010

Notice to our members

The Wildlife Preservation Society of Australia Limited is managed and controlled by an elected board of ten volunteer directors. The Society is a registered company limited by guarantee with ASIC and is responsible for complying with all its regulations.

Any member who might like to consider serving as a director of the Society is invited to contact the national office for more details. The most important qualification to serving as a director is "a commitment to and love of Australian wildlife".

The Society holds regular monthly meetings on the first Wednesday of each month in Sydney.

The Editor would like to feature a member's profile in the fortnightly email newsletter and occasionally in our quarterly magazine. Members are invited to consider submitting a short article with a photograph for possible publication.

Our Mission

The Wildlife Preservation Society is an independent, voluntary, non-profit conservation organisation, formed in 1909, and is committed to the preservation of Australia's precious flora and fauna. We act as a watchdog and provide advice to government agencies and institutions regarding environmental and conservation issues concerning all aspects of wildlife preservation. Our mission is to conserve Australia's fauna and flora through education and involvement of the community. We are dedicated to the conservation of our unique Australian wildlife in all its forms through national environmental education programs, political lobbying, advocacy and hands on conservation work.

Our Society has always known that a conservation battle is never really won until the victory is enshrined in legislation. We have always tried to convince politicians of the necessity to include the preservation of Australia's precious wildlife and its vital conservation habitat in all their planning and environmental issues and discussions.

From the President's desk

Suzanne Medway - President

We were pleased that the projects we funded last year to protect the bilby and reduce fox predation are proving successful. We wish all those involved in wildlife conservation programs well as they struggle against the odds to save our wildlife from extinction.

It has been a busy few months leading up to the production of the winter edition of *Australian Wildlife*. In March this year I represented the Society at the National Wombat Conference in Albury, which proved to be one of the most outstanding and interesting conferences I have ever attended. I always love meeting and talking to wildlife carers and I must say wombat carers are some of the most dedicated and caring people I have ever met! One lady told me she hadn't been on a holiday for 21 years because she always has injured or young wombats in care. In fact, during the course of the conference she missed her wombat charges so much, and started to worry about them, that she went home a day early!

Linda Dennis, our regional advisor, also attended the conference and this edition features an article of her impressions of the conference. This issue has become almost a "wombat" special, with a fascinating address on the importance of native wildlife to indigenous peoples by Yalmambirra, a Wiradjuri elder from Canberra, and an article by writer Jackie French on her experience with wombats; and lots and lots of wombat photos. Hope you enjoy this edition.

At the national conference I asked the delegates to send me photos of wombats for the magazine and said there would be a competition for the front cover. I have been inundated with some wonderful photos and have had a very hard time selecting the winning photograph. Many of the carers also sent in their own personal stories and in the end I decided to include as many photographs and stories as possible. I ended up all one Sunday looking at wombat photos and have fallen in love with these beautiful creatures and their beautiful faces. I can well understand why the carers become so dedicated to the rescue and rehabilitation of Australian wombats.

During May I had the privilege to visit Perth, Western Australia to catch up with some of our members, to review some of the wildlife conservation projects we are undertaking in Western Australia, and to meet a dedicated wildlife officer, Ann Biasol from the WA Department of Environment and Conservation. Ann works in the Pilbara Region as a regional wildlife officer and operates in the busy mining areas as well as some very remote areas of the state.

We visited the WA Department of Environment and Conservation head office and accessed their wide range of wildlife conservation literature about the programs the Department conducts across the vast state of Western Australia.

While the mining boom is wonderful for the national economy, it is truly devastating for the local natural environment and native wildlife in the mining areas. We heard many stories of native animals being run over, dying in open trenches and in mining site operations. While there are many protocols in place to protect the native wildlife, there is a real shortage of qualified people who are prepared to work in such remote areas and extreme conditions to oversight the operations of mining and trench back-filling.

We were pleased that the projects we funded last year to protect the bilby and reduce fox predation are proving successful. We wish all those involved in wildlife conservation programs throughout the State well as they struggle against the odds to save our wildlife from extinction.

After Perth, it was then a quick visit to Darwin in the Northern Territory. We met up with the Chairman of Frog Watch and Mayor of Darwin City Council, Graham Sawyer, to discuss his valuable wildlife conservation work. Graham is very enthusiastic about wildlife conservation and has dedicated himself especially to the problem of the cane toad invasion. After many years of commitment to solving the problem, he believes that if the toads can be blocked from accessing water during hot weather, they can be prevented from spreading any further. He has experimented with a low mesh fence to block the toads from accessing water holes and it has enabled the volunteers to more easily collect and destroy the toads, as well as stopping their spread across the country.

Graham has been featured on the ABC news and environmental programs a number of times recently illustrating the results of his cane toad eradication programs.

Graham also has a wide interest in wildlife conservation generally and is doing a great job spreading the word across the north of the sad decline in native animals through land clearing, roadkill and increasing commercial development. Council has a number of conservation programs in place to preserve and protect the native flora and fauna throughout the city area.

The Environmental Centre of Northern Territory also does a wonderful job of promoting wildlife conservation and spreading the conservation message across the Territory. Led by Dr Stephen Blanch, the Centre produces the publication *Pandanus* which is full of very useful conservation information.

Suzanne Medway at the National Wombat Conference 2011. Full story on page 13

WPSA celebrates with a Gala Dinner

Suzanne Medway

Professor Ross Milbourne, Suzanne Medway, Professor Marie Bashir and Jack Mundey unveil the Commemorative Plaque

The Society's Gala Dinner held on the evening of Monday 6 June to celebrate World Environment Day, the 40th Anniversary of the first Green Ban and to launch the Wildlife Preservation Society of Australia's Wildlife Ecology Science Research Scholarship was an outstanding success.

Over 100 people attended and enjoyed an evening of laughter and reminiscing, plus a sumptuous three course dinner.

As President of the Wildlife Preservation Society of Australia and co-host of the Gala Dinner, I opened the proceedings and acknowledged the Gadigal and Guring-gai people of the Eora Nation upon whose ancestral lands the University now stands.

Honoured guests included Her Excellency, Professor Marie Bashir AC CVO, Acting Administrator of the Commonwealth of Australia; Sir Nicholas Shehadie AC OBE, co-host Professor Ross Milbourne, Vice Chancellor and President of the University Technology Sydney, and his university colleagues; Mr Jack Mundey and Mrs Judith Mundey; Councillor Richard Quinn, Deputy Mayor, and Barry Smith, General Manager, of the Hunter's Hill Council; Tom Grosskopf, Director of the Office of Environment & Heritage; The Hon Dr Meredith Bergmann; Life Members and Members of the Society and especially the wonderful 'Battlers for Kelly's Bush' from Hunters Hill Sydney.

Professor Maria Bashir is a long and dear friend of our Society and its members, having unveiled our Society's Centenary Plaque as our Guest of Honour at our special Centenary Luncheon in 2009. She is an inspiration to us all for her great commitment and dedication to our community.

Her Excellency was invited to address the gathering, officially launch our new Scholarship and to later to unveil a special Commemorative Plaque to mark 40 years since the Battlers saved Kelly's Bush back in 1971.

Speech by her Excellency Professor Marie Bashir AC CVO Administrator of the Commonwealth of Australia

It is a great pleasure to join you this evening to commemorate and celebrate the initiative 40 years ago – the Green Ban movement. At this stage, may I record my respect for the traditional custodians of the land upon which we gather — the Eora Gadigal people, their ancestors and descendants — indeed, for all Australia's Indigenous people who have nurtured this land for tens of thousands of years.

As we reflect upon this anniversary, we cannot doubt that this historic and courageous activist movement was nurtured and led by an exceptional man

Suzanne Medway, Jack Mundey and Lyn Woodger Grant

– Jack Mundey – who honours us with his presence tonight.

It has been said, absolutely correctly I would add, that "the Green Ban movement of the 1970s was the birth of the urban environmental movement. Over a period of four years from 1971, the Builders Labourers Federation and community activists imposed 43 Green Bans with a value of around $3 Billion, preventing rampant development and saving many vital urban spaces and over 100 buildings considered by the National Trust to be worthy of preservation.

And as history records, the Green Bans illumination of the treasures which could never be replaced, or priceless natural environment which would irreversibly be damaged, led to the introduction of heritage legislation by the state government in 1979 – a first in Australia.

Another great consequence of that fearless activism, I believe, and in which Jack played such a key role, was the gradual raising of a collective consciousness across the nation, that each of us regardless of any personal, political or professional affiliation could – and should – recognise and accept responsibility for protecting and preserving our unique environment despite the intentions of powerful developers and others. And in exerting that responsibility, inspired by what Jack and his colleagues had achieved, we could be winners.

So across these past 40 years we have seen this model re-enacted, certainly on a smaller scale, in countless municipalities, towns and cities across Australia.

The story of Jack Mundey's journey to activism begins in a delightfully Australian way! Perhaps, some might claim a biblical association – a fiery prophet from the north. But it was sport which first drew him down to Sydney from Far North Queensland in 1950 to play rugby league with the Parramatta club. But as a committed trade unionist, leader of the new Builders Labourers Federation (the BLF), passionate and determined also about our environmental heritage, he forged an immensely valuable link with the late Dr Vincent Serventy AM, then leader of the Wildlife Preservation Society of Australia.

The Wildlife Preservation Society then joined with Jack Mundey and the BLF

Patrick Medway, Dr Ursula Munro, Jaine Fleetwood, Suzanne Medway, Deidre Bowes and Steve Johnson

Deidre Bowes, Margaret Deas and Colleen Keys enjoying the Gala Dinner

Heather and Stephen Grabowski

Tiffany McDonald, Suzanne Medway, Professor Marie Bashir and Commander David McDonald RAN

Audrey Koosman, Margaret Deas and Shirley Lack

Sueki Owen, Cathie O'Brien, Dr Meredith Burgmann, Felicity, Eleanor Chevor, Lynne Chevor and Captain Jason Christopher ADC

to introduce the first Green Ban, in the world, to save Kelly's Bush at Hunters Hill.

In subsequent years, this movement of activism, vilified in some quarters by those driven by self-interest, limited vision or both, succeeded in saving for future generations of Australians, larger areas of The Rocks, Woolloomooloo and Centennial Park.

I can never forget my personal anguish on those times, with a life-long love since early childhood of picnics with grandparents in Centennial Park, of exploring The Rocks in halcyon student days with romantic friends, and then in the early seventies as the wife of the Lord Mayor of Sydney caught in what was perceived by many to be a revolutionary movement.

Fearful of the possible destruction of The Rocks, I would silently take myself to the protest meetings, sitting inconspicuously I thought, at the back of the hall. But one evening at The Rocks I was spotted and proudly declared my unbroken allegiance to the movement. Without doubt this movement has proved to be one of the most significant chapters in the history of modern Australia.

It is noteworthy that only four days after the opening of the Sydney Opera House by Her Majesty the Queen on 20 October 1973, resident action groups supported by the BLF held a fiery demonstration to halt demolition of The Rocks which apparently had just commenced.

But may we recall the words of the historians. Under the heading "a man of principle: Jack Mundey", Donald Horne reminded us – and I quote "it was an occasion that symbolised a changing Australia when in September 1983, the Governor of New South Wales, Sir James Rowland, unveiled a plaque in the Uniting Church in Pitt Street, honouring ... Jack Mundey. The Ceremony was to celebrate the fact that during the great building boom of the 1960s – 1970s, the old Church had been saved from demolition because the Builders Labourers Federation had placed a 'Green Ban' on it."

A changing Australia indeed, which was then, through the Green Ban movement, able to demonstrate that the protection of our environment and its unique native wildlife and terrain were irrevocably linked and that protection of our wildlife was already critical.

Since their foundation, the Wildlife Preservation Society has been at the forefront in this regard – ever vigilant with applied scientific understanding. It is therefore so appropriate that the trophy which commemorates this historic 40 year landmark will take the form of a University of Technology Sydney Wildlife Ecology Research Scholarship, "which seeks to enable students to undertake further study into wildlife and ecology" – in other words a gift to the nation!

May I speak on behalf of all the people of New South Wales – indeed Australia – in expressing our great and continuing appreciation for what has been and will be achieved, in the spirit of Jack Mundey, Vincent Serventy and all who follow that vision.

Professor Ross Milbourne, Vice Chancellor and President of University Technology Sydney expressed appreciation to Her Excellency for gracing the occasion with her presence and for officially launching the new WPSA/UTS Wildlife Ecology Research Scholarship. He expressed delight to be at the Gala Dinner to help the Wildlife Preservation Society to raise funds for the new Scholarship. UTS is proud to enjoy a strong connection to WPSA, as Patrick W Medway AM, CEO of WPSA, is an Alumnus of the UTS Communications degree, and a Life Member of the University Union. UTS has demonstrated commitment to environmental sustainability and seeks to further this through teaching and learning, research and actions as an organisation.

UTS' work in Wildlife Ecology is well known and colleagues from the Faculty of Science attended the Gala Dinner including Professor Bruce Milthorpe, Dean of Science, and Professor Bill Gladstone, Head of Environmental Sciences.

Professor Milbourne expressed his delight that UTS and WPSA are collaborating on the exciting initiative of a new scholarship.

Jack Mundey then spoke on his recollections of the first Green Ban.

Jack Mundey, born in 1929, played a key part in the history of both unionism and the environmental movement in Australia. Mundey emerged into the public eye during the 1970s as

Dr Laurie Grace, Alice and John Grabowski

Judith May (WPSA Director), Steve Wilson and Vanessa Wilson (WPSA Director)

Diane Connor, Deidre Greenhill, Margaret McGurgan and Suzanne Medway

Professor Ross Milbourne, Judith Mundey, Professor Marie Bashir, Jack Mundey, Sir Nicholas Shehadie and Suzanne Medway

The Battlers for Kelly's Bush in front of the WPSA Banner

Judith May and Peter Hardiman (WPSA Directors)

a leader of the New South Wales Builders' Labourers Federation (the BLF) and as the figurehead of the famous 'Green Bans' of the period. These were industrial actions intended to protect the natural and built environment of Sydney from excessive and inappropriate development. They were very successful receiving popular support, and many central elements of Sydney's environmental heritage were preserved due to the BLF's activities, often in the face of strong opposition from developers and the NSW State Government.

The union and environmental activism campaign undertaken by the BLF led to large areas of The Rocks, Woolloomooloo and Centennial Park being preserved, along with many buildings of individual heritage significance. It has been estimated that between 1971 and 1975, the BLF green-banned some 43 projects with a value of around $3 Billion. In the wake of the BLF's activities, the New South Wales State Government enacted heritage protection legislation that led, amongst other things, to the establishment of the Historic Houses Trust.

Sydney in the 1960s, like many other major cities in the world, was undergoing major changes. Strong growth in the economy had led to a drastic rise in construction, and old buildings and precincts were demolished to make way for modern skyscrapers and up-market housing. As the price of space in the inner city climbed higher and higher, some people felt that government and developers were destroying the history and memory in the inner city communities, by evicting residents, demolishing their houses and dispersing them to suburbs or, in some cases, leaving them homeless. The BLF was particularly concerned about arrangements between developers and non-union labour to rush through projects at the cost of local heritage and the environment. Membership of the NSW BLF rose significantly in this period, from 4,000 to around 11,000, partly due to the building boom and partly due to active recruitment.

The first environmental 'Green Ban' occurred in the upper middle class Sydney suburb of Hunter's Hill. An

area of five hectares of urban bush (which remains today) was bought by the developer A V Jennings with the intention of building 25 luxury houses. Kelly's Bush was one of the last areas of bush on the Parramatta River waterfront, and the residents of Hunter's Hill, led by a group of local women, held serious concerns for the future of their suburb's environment. The bush, they argued, belonged to the neighbourhood, and should be preserved rather than destroyed for the sake of more luxury housing.

The BLF applied the traditional black ban action, which was used to boycott building sites, and applied it to the Kelly's Bush site, thus earning the name 'Green Ban'. They refused to work on any project at the site, and when the developer threatened to get non-union labour in, they held a meeting on a half-finished A V Jennings building site in North Sydney, proclaiming that if a single blade of grass was removed from Kelly's Bush then the building would remain forever half-finished.

The preservation of Kelly's Bush set a precedent for further Green Ban action around Sydney.

Concluding remarks

Through the gracious support of Her Excellency and Sir Nicholas Shehadie, Professor Milbourne and his colleagues at UTS, Jack and Judith Mundey, the wonderful party from the Battlers of Kelly's Bush and our other friends and members, the Society was able to raise some $4,600 towards the Scholarship, which when added to our President's special contribution of $5,000 bought the total to nearly $10,000 for our new Wildlife Ecology Research Scholarship.

Scholarship Appeal still open

The Board has decided to keep the Scholarship appeal open throughout the remainder of 2011 and invites everyone to continue to make a contribution towards the Scholarship for young people to study wildlife conservation at the University of Technology, Sydney.

All donations towards the Scholarship are fully tax deductable and a receipt will be forwarded by return mail.

Paul Richardson, Margaret McGurgan, Steve and Vanessa Wilson, Dr Laurie Grace, Tiffany McDonald and Commander David McDonald RAN

Noel Cislowski and Bob Gaussen

Dr Clive Williams (Vice President WPSA) and grandson Jack Williams

Celebrating the 40th Anniversary of Green Bans

Janine Kitson, NSW Teachers Federation's representative to the National Parks Association of NSW, Past President of the David G. Stead Memorial Wild Life Research Foundation of Australia

2011 marks the 40th Anniversary of the first Green Bans – union stop work bans – to protect places of environmental and heritage significance. It was an Australian union – the NSW Builders Labourers Federation (BLF) that initiated the first Green Bans in 1971 that led to awareness of the collective responsibility – including the union movement - in protecting the environment.

The 1970s saw the BLF implement Green Bans on building projects that otherwise would have demolished much of Sydney's colonial and Victorian inner city suburbs.

At the recent Wildlife Preservation Society of Australia fundraising Gala Dinner, held to mark World Environment Day, June 2011, Jack Mundey, former Secretary of the BLF, spoke about the remarkable achievements of these world first Greens Bans. The Governor of NSW, Professor Marie Bashir AC CVO, also spoke about her recollections and support for the Green Bans when she launched the new Wildlife Preservation Society of Australia Wildlife Ecology Research scholarship.

In 1971 the Builders Labourers Federation, a progressive union, led by Jack Mundey, placed the world's first Green Ban on Kelly's Bush that was threatened with being razed for housing. A local Hunters Hill women's group – called the 'Battlers for Kelly's Bush' – sought the support of the BLF to save their precious pocket of bushland along the Parramatta River at Hunter's Hill.

Saving Kelly's Bush is one of Australia's most significant conservation achievements of the 20th century because it led to other Green Bans that were so significant in preserving Sydney's built and natural heritage.

Jack Mundey describes the achievement of the Green Bans as an effective partnership "between the enlightened working class and enlightened middle class".

The Wildlife Preservation Society of Australia, which held the celebration, is one of Australia's oldest conservation groups, formed in 1909. Dr Vincent Serventy, an acclaimed conservationist was for many years its president, as well as Thistle Y. Harris (1902-1990), a strong Federation member and its founder David G. Stead (1877- 1957) one of Australia' foremost conservation pioneers.

The celebratory Gala Dinner, held at the University of Technology, also raised funds for a new research scholarship for Australia's unique wildlife. A commemorative plaque for the 40th Anniversary of the Green Bans was unveiled and gifted to Hunters Hill Council for display in Kelly's Bush.

The NSW Teachers Federation has long recognised the positive and active role that workers can play in protecting the built heritage and natural environment. The Federation actively supported the Green Bans movement when its Environment & Ecology Committee in 1975 put forward a motion to Federation Council to form an affiliation with the 'Friends of Green Bans'.

The successes of the Green Bans led to progressive planning legislation in 1979 – the *Environment, Planning and Assessment Act* and *Heritage Act* – that enshrined the 'public interest' and environmental protection. Since then, as outlined in the recent Sydney documentary *State of Seige* many of the legislative reforms have been systematically dismantled, particularly as the development/construction industry is a significant donor to the major political parties.

The Green Bans were implemented in the context of the Askin Coalition government. The documentary *State of Seige* puts forward the argument that corruption has now been systematically embedded into NSW's planning legislation that allows the green light for rezoning areas for higher densities which effectively destroys the amenity and natural environment of many Sydney suburbs, coastal and regional areas. The new NSW government has promised to repeal the insidious Part 3A which allowed developers to bypass environmental and heritage protection.

The Greens Bans went on to inspire the formation of the world's first Greens Party in Germany.

The 1970s Green Bans are effectively "the birth of the urban conservation movement". Before the Green Bans, conservation concentrated on the protection of natural areas. The Green Bans highlighted the need to protect the built environment. By 1974 the BLF had imposed 42 Green Bans across Sydney, saving sites such as the Rocks, Centennial Park, Victoria Street in Kings Cross, and many other National Trust listed buildings and places.

Janine Kitson at the Gala Dinner

David Beswick, a NSW Teachers Federation Officer in the 1970s, was a significant player in raising the need for environmental protection to the Australian Council of Trade Unions. In 1972 David Beswick wrote about how there was "*enormous potential in protecting our environment and I look forward to a greater trade union involvement in the arrest of environmental decay ... I believe it is a legitimate activity for corporate bodies to clean oil-polluting beaches and, more importantly, to confront the bodies that created the damage. This confrontation can take the form of court actions, boycotts, lobbying politicians, denying labour, and stockholder strategies. The Club of Rome has said, 'We haven't much time . . .*"

The Green Bans Movement was an exciting, challenging and profoundly proud time because of the strong alliances forged between unions and environmentalists that saved so much of Sydney for future generations.

Jack Mundey concluded the celebration by saying the future's biggest challenge was the battle to ecologise and humanize the world where humans were harmonised with nature.

Conference attendees

Wombat Conference

Linda Dennis, Regional Advisor, WPSA

Wombats, wombats, wombats! What a great way to spend a long weekend, with a bunch of wombat enthusiasts talking all day, every day about wombats!!!!

The National Wombat Conference was held in Albury over the weekend of 18–21 March. Over 100 delegates from all over Australia attended, bringing together a wealth of knowledge on wombats, their habitat, their illnesses, their sexual activity and much more. The list of speakers was long and distinguished and included many a well known wombat-nut.

The function was kicked off with a hilarious talk by Jackie French. Unfortunately, due to poor health, Jackie couldn't make it to the conference but her talk was presented by Naomi Henry who did a sterling job of "talking wombat". We are delighted that Jackie gave permission for part of her talk to be published in this issue of *Australian Wildlife*.

Just some of the topics from the three-day event included: roadkill by Dr Erin Roger of the University of NSW; the law and wombats by B J Kim, solicitor from the Environmental Defender's Office; the history of the northern hairy-nosed wombat by Dr Alan Horsup of Queensland Department of Environment and Resource Management; wombat gates and diurnal behaviour by Sydney University's Dr Philip Borchard; feeding regimes for wombats by Shirley Lack and Lesley Waterhouse; disaster management of wombats during floods by Audrey Koosman; and learning from wildlife: relational ethics, sustainability and neuroscience by Professor Steve Garlick of the Sunshine Coast and Newcastle Universities and President of the Animal Justice Party.

Jolene McLellan of Queensland Parks and Wildlife Service shared news of the bare-nosed wombats in the most northern area of their distribution, Girraween National Park in Queensland. These special little animals, who are very shy and are rarely seen, have been captured on film over the last three years using remote infrared cameras. We viewed footage of a mum and joey, witnessing their interactions and behaviour at the burrow entrance. Surprisingly, mum left the joey alone at the burrow quite often and even moved him to his own little burrow while he was still quite small. The carers at the conference were surprised to see the joey left alone, way before we thought it would be able to fend for itself in the wild. Very interesting stuff - it made us wonder, was she a bad mum or do wombats really know much more than us silly humans!

Dr Lindsay Hogan, researcher at Perth Zoo, gave a vivid account of the reproductive behaviours of the southern hairy-nosed wombat. Complete with thrusting and heaving demonstrations and quips of wombat love fantasies, Lindsay's talk had ripples of laughter throughout the room. The wombat's low reproductive rate, however, coupled with the adversities they confront on a daily basis, had us all concerned – the future does not look so bright for the southern hairy-nosed wombat. It would appear that there are fewer wombats being born compared to the number we lose each year to adversities such as roadkill, sarcoptic mange, predator attack, habitat loss, etc. We learnt that wombat love consisted of six consecutive phases: investigation, attraction, chase, restraint, coitus and recovery. And sometimes the coitus can last so long that recovery is definitely required!

Dr Howard Ralph and Dr Anne Fowler both gave talks that would undoubtedly help wombat carers. Howard spoke of pain management in wombats, how the treatment and prevention of acute pain help to preclude the establishment of chronic pain which has a negative influence on recovery, rehabilitation and release. In short, be quick to address pain! Anne spoke of dental problems in wombats, whose teeth grow continuously through life. She advised that mouths should be checked routinely as malocclusion, when the teeth do not align properly, can be very painful and it is a condition that should be treated as a matter of urgency.

Undoubtedly, the most anticipated talk of the conference was news on the creation of a second colony of northern hairy-nosed wombats at Richard Underwood Reserve near St George in Queensland. Dave Harper of Queensland's Department of Environment and Resource Management told an enthralled audience how the translocated wombats were doing well and that there was even a pouch young in the colony! When we were privileged with seeing video

Audrey Koosman and Patrick Medway

Patrick Medway gave an address to the conference on WPSA and its history of wombat preservation

footage of mum with the unmistakable bulge in the pouch the room erupted in applause. In all, 15 wombats were translocated from Epping Forest National Park in Central Queensland to the new reserve. Some, sadly, have been lost, as would be expected in any radical translocation such as this, but twelve wombats – plus the new joey – are doing very well. Since the conference it has been advised that a second pouch young has been seen at the reserve.

Delegates of the conference also had a chance to kick up their heels at the conference dinner – a chance to chat, laugh and have a drink with other like-minded wombat-ers. All in all, it was a great weekend, the conference was a great success and there are people champing at the bit to attend the next conference which is likely to occur in two years' time.

Papers from the conference are due to be released soon and will be downloadable from The Wombat Protection Society of Australia's website at www.wombatprotection.org.au.

Linda Dennis and Tracey Atkinson

Jill Morris

Tracey Atkinson, Roz Holme, Linda Dennis, Robin Crisman, Suzanne Medway and Anne Williams

Suzanne and Patrick Medway at the Conference Dinner

Amanda Cox and Marie Wynan

The importance of native wildlife to Indigenous peoples

Yalmambirra, a Wiradjuri elder

Address to the National Wombat Conference 2011

In welcome, I would firstly like to acknowledge country (Wiradjuri) and acknowledge Biammiee our Creator. I also acknowledge custodians that fought, and died, protecting their custodial rights. I acknowledge and welcome all Indigenous and non-Indigenous peoples to my thoughts on "The importance of native wildlife to Indigenous peoples".

My peoples are story tellers. The stories relate every day occurrences to those who were not present when various events happened. This is how it has always been and in relating my thoughts, I will adhere to that cultural way of storytelling.

My story begins sometime, somewhere in the desert country of NSW. A fellow lecturer and I often take a bus load of students out into the desert for twelve days. I drive the back-up vehicle often referred to as 'The Ambulance'. I usually have a couple of students in the Ambulance with me. However, when travelling through vast expanses of flat open country one can become bored very quickly. One morning the students travelling with me pointed out high dead trees with equally large nests in them. Being an opportunist, I seized the moment to educate, keeping in mind that they were Environmental Science students.

I asked them what they thought used those nests and they replied in unison: 'Eagles!' – 'Nope,' I said. 'They are the nests of baby elephants.' ... Silence and then: 'That's impossible because elephants don't live out here.' 'But they do live out here,' said I. And so I related this story to them ...

The mother elephants put their babies up in very high trees in very large nests so they don't get eaten by the giraffes. See, giraffes have very long legs and necks and can reach high places ... Silence and then: 'But if the giraffes can eat the baby elephants, how can the elephant population survive?' asked the students. 'Well,' said I, 'the hyenas help out by eating the legs off some of the giraffes and that way only some can reach baby elephants ... Silence again and then the students asked: 'But what stops the hyenas from over-breeding and eating all the giraffes' legs?' 'The pterodactyls,' said I, 'You see, the pterodactyls eat the hyenas.' Silence and then: 'But what stops the pterodactyls from over-breeding and eating all the hyenas?' asked the students. 'The stone people,' said I. 'You see, the stone people live in the stony desert areas and when night comes they sneak up to the pterodactyls and because pterodactyls sleep with their mouths open, the stone people can fill some of them up with little stones so when they wake up, some of them can't fly and therefore not all pterodactyls can eat all the hyenas, which means all the hyenas cannot eat all the giraffes' legs and that means only some of the giraffes can eat the baby elephants ...' Silence and then: 'But that's not true because elephants don't live out here,' said the students in unison. 'But they do,' said I.

Later that evening we were passing through a property and opening and closing gates. As you do, you see yellow signs with cows painted on them. Around the corner there was a gate with a sign with a cow painted on it ... and next to the cow was – an elephant!!!! Silence for the next 100 kilometres.

There are two lessons in this story. The first can be located in how one species depends upon another for survival. Wiradjuri peoples ate just about everything that walked, crawled, swam, flew, spun webs and hopped, skipped and jumped. The resources provided to us by our Creator sustained us since the beginning of time. But that's not where this ends. Our spiritual connection to country can be found in every animal and bird and insect and fish, for example. They become our totems and when one has a totem or totems, then one has totemic responsibilities; they are our spiritual link not only to country, but to ancestors and our Creator. Our totem/s guide us through life – we are at one with them. Under law, there were certain taboos associated with totems. For example, not eating your totem; others could, and we could eat theirs. In this way, the food chain was sustainable, our spiritual connections maintained and our very survival as the oldest living cultures in the world continued.

The second lesson can be located in how non-Indigenous people believe that they know our country better than the original custodians do – even when we tell them something, they don't believe; they seek and need proof. But we have our own thoughts, experiences, wisdom, knowledge, skills and ideas on country. An example here may provide food for thought.

During one of the desert trips, we had the opportunity to visit the Iga Warta community located in the Flinders Ranges. Some of the local Elders run a bush-tucker tour and the students were invited to participate. During the tour, one of the Elders asked the students if any of them had a wart. Holding her hand out, one of the students said yes. The Elder took the young lady's hand and led her to a bush that had needle-like growth on it. The Elder asked the young lady: 'Do you think I can take the wart away?' The young lady had no hesitation in replying in the negative: 'No,' she said.

The Elder took one of the needles from the bush and said to the student: In order for this to work a number of things must happen. Firstly, I have to stick this into the wart and draw blood. The young lady's hand began to tremble a little. Secondly, you have to leave the needle in for two days. More trembling and lots of laughter from fellow students. The young lady agreed to try. 'Ouch,' or words to that affect, from the young lady when the needle went in – bright red blood appeared.

The students watched carefully over the next two days and all helped in making sure that the needle stayed where it was, however painful for the young lady. Two days passed and it was time for the needle to come out. The following morning the wart had vanished!

My friends, Indigenous belief systems did not over-reach the carrying capacity of local environments; they nurtured them, like a mother does her children. But for over two hundred years we have not been allowed to continue our country practices. In contemporary times this has changed – a little. Indigenous peoples are going back to country and undertaking sustainable use of native wildlife resources and legislation and policy such as native title and national park co-management opportunities are providing avenues for some Indigenous peoples to do this. But, is it possible to return to fully traditional ways of hunting and gathering? No, it is not and there are a number of reasons for this.

There are a number of issues that arise when one speaks of traditional, sustainable use of wildlife resources, whether on land or in water. These issues often are located in how sustainable use can be effective when traditional ways of doing have adapted to new technology, for example guns, off-road vehicles and boats such as trawlers. There may well be times when and where rare and endangered species are impacted upon; harvesting levels rise and become accepted practice; introduced species such as feral animals can be harvested rather than be treated as the pests they are; and habitat is destroyed when harvesting takes place (Collins, Klomp and Birckhead 1996 cited in Bomford and Caughley (eds) 1996). In order that Indigenous harvesting of wildlife is carried out sustainably, the practice must be monitored and evaluated and done so on an on-going basis. Then there is the other side of the debate.

Changes in technology do not necessarily mean over-exploitation of resources. Off-road vehicles, for example, are used to take tourists around country in order that they may experience, not only the natural environment, but also provide an opportunity to learn about cultures and history. The introduction to, and the use of, modern technology is not available to all. Many women still walk through country to obtain specific resources in the more remote areas of country, for example. The use of vehicles can also disperse hunting and gathering activities away from more settled areas where the dangers of over-exploitation can occur (Collins, Klomp and Birckhead 1996 cited in Bomford and Caughley (eds) 1996).

Being on country is not just about looking after that which we are custodians of by rights of birth – it's more than that. The ability to be on country once again can be a pathway to cultural continuity in part, and hence, cultural survival. It's also about self-determination and social justice. Native wildlife has been over-exploited and habitats have been raped and pillaged for the last 200 plus years and the time has come to right wrongs. Our Earth Mother needs her peoples and we need her resources. But we cannot do it alone. White and black scientists need to come together, consult with each other, involve as many stakeholders as possible and work together. One day, my friends, the native wildlife may be gone and gone forever … We must stop taking and taking. We must give back. We must allow the land to heal. We must be allowed to sing and dance for country, undertake specific ceremonies for country that heal the peoples as well.

Put very simply, it's all a three-part jigsaw puzzle. One piece of the puzzle is the environment; the second piece, the scientists; and the third piece of the puzzle are the people, you and me.

How can the environment be cared for if you take away the scientists? The scientists in Wiradjuri are our Elders and it's those people who tell us what we can eat, what is good for medicine and what is not, when the emus and kangaroos will return and when rain will flood valleys and when drought will affect all. Take the people away and who will the scientists educate to carry out the instructions that would see sustainable practices undertaken? As an example and to contextualise, your friends, the wombats, and their habitats, are your part of the environment; your scientists educate you and you work in the field to carry out certain practices that will ensure the wombat has a future. Simple …

My friends, no one piece can operate in isolation from the other: take one away and you don't have a jigsaw puzzle; take you away and what future does the wombat have? We must develop partnerships, we must work together to ensure that the environment and all which that entails, is cared for in ways that are sustainable.

It should be noted at this point that Wiradjuri knowledge of and about the environment is not the domain of any one individual; we are not black dictionaries! Knowledge therefore is a collective, whereby each person contributes to the care and protection of their local environment, in partnership with each other.

On behalf of the Wiradjuri Council of Elders we sincerely hope that you forge new partnerships with us and in so doing utilise the collective knowledge in partnerships that will stand the test of time and provide sustainable, ethical and appropriate ways of caring for native wildlife that will benefit all, now and into the future.

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Editor's note:

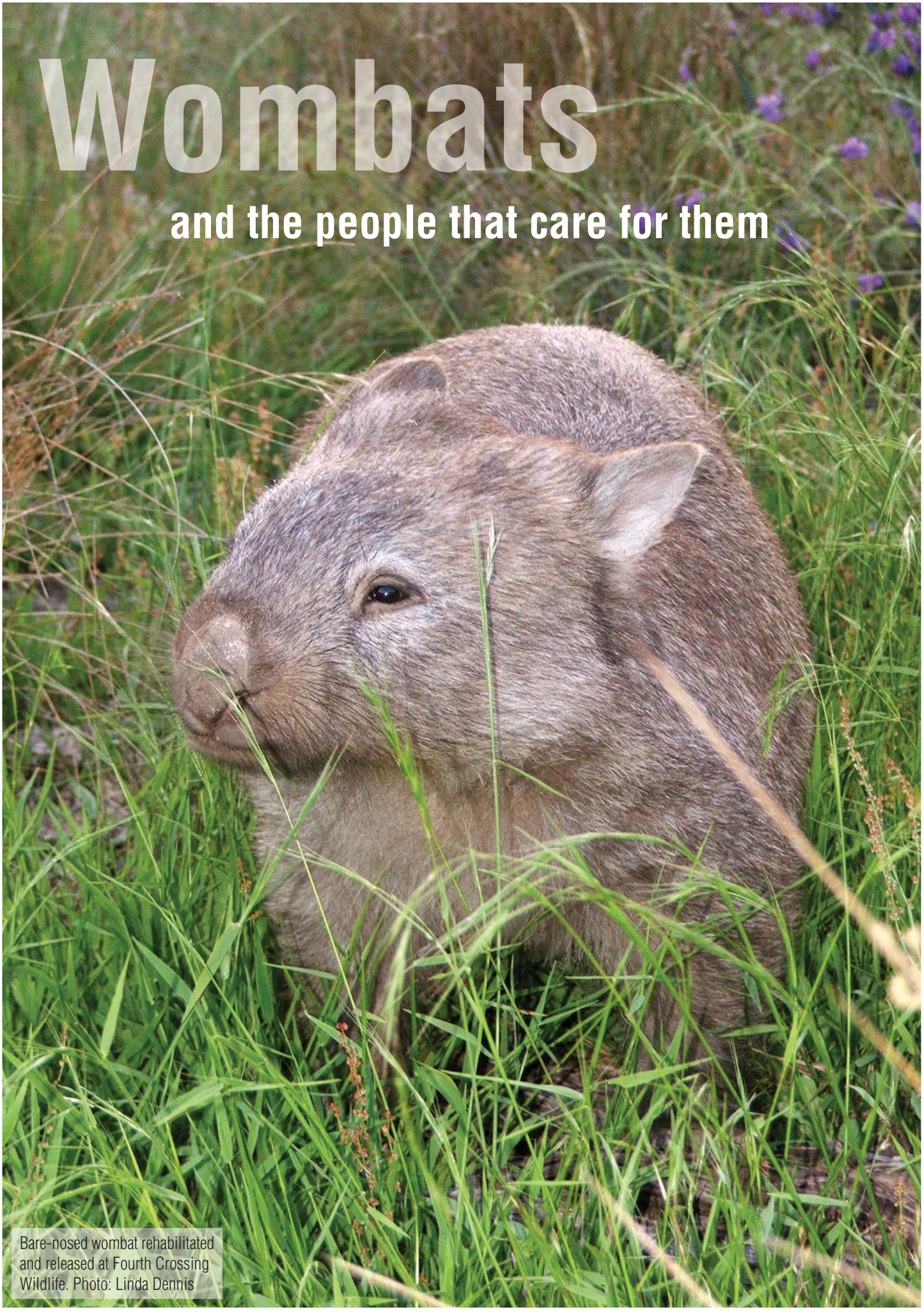
Yalmambirra is a Wiradjuri man and a member of the Wiradjuri Council of Elders. He is the Koori Academic (Wiradjuri) on the Thurgoona Campus of Charles Sturt University. In his role as a lecturer at CSU, he teaches a subject (amongst others) that covers the principles behind Indigenous land management.

Yalmambirra began his academic career at age 43 and is nearing completion of his PhD: 'Indigenous cultures in contemporary Australia: A Wiradjuri case study'.

Yalmambirra lives on 20 acres of land called Girragirra Ganya with his wife Paula. Their home is part of the Wildlife Land Trust and at this point in time they are revegetating the land, building wildlife corridors and also trying to get the message to their neighbours to do the same.

Wombats

and the people that care for them



Bare-nosed wombat rehabilitated and released at Fourth Crossing Wildlife. Photo: Linda Dennis

Wombat myth and wombat magic

or how to learn to speak wombat in 35 years of smelly lessons

Jackie French

Consider the wombat: four short legs, negligible ears, and a face that is mostly nose. Whiskers optional – some wombats have luxuriant ones, others just stubs.

And that is what most Australians see - either asleep or blearily snuffling at the zoo or, more likely, bloated by the side of the road.

Few people ever see the secret side of wombats: that mischievous wombat grin, not a stretch of the mouth like humans but still ... somehow ... a grin, usually at someone else's expense; the look of ecstasy as it flattens into doormat position on your lap while you scratch behind its ears or, even better, rub (more a confined kick) its back with your boot, so it melts into fur and happiness.

The yips in the night of wombat courting behaviour, the sudden 'mad wombat' lunges when caught up in a solo game, boxing shadows in the moonlight.

Few Australians have ever lived with wombats. Many – the wonderful carers of wildlife rescue societies – may rear young wombats or look after injured ones. But a wombat brought up by humans behaves very differently from a wild wombat. Even researchers usually either study wombats kept in zoos and wildlife parks or wild wombats for only six months at a time.

But wombats vary as much as humans do. Each wombat is an individual and wombat behaviour changes depending on the weather, the number of other wombats around, the locality and many other variables.

Wombats are one of Australia's most iconic animals, but we know very little about them – and what we do know may be either incorrect or misleading.

How do we know how wombats behave?

From 'general knowledge' – which may be folklore. And from research and other scientific studies which should be accurate.

We also assume that animals – like wombats – don't have 'culture', ie learned behaviours that are passed on from other wombats. We too often take it for granted that if you study one lot of wombats you can apply those results to all of them and that you can rear wombats away from other wild wombats and they'll instinctively know most of the wombat skills to survive.

Neither is accurate. Wombats vary – just as humans do.

How much is innate, and how much is learned?

Humans usually assume most animal behaviour is innate, instinctive. Even those who care for injured wombats may subconsciously subscribe to this, assuming that a baby wombat can be reared by humans then returned to the wild with no preparation except letting it gradually get used to the territory.

In the past 35 years I have spent at least two hours a day (or night) and often more observing wild wombats. I've kept detailed notes on the complete lives of 76 wombats in that time and observed many others for shorter periods of time; watched them live,

love, breed and die in both drought and good times. I have learned that behaviour among wombats varies from individual to individual just as it does with humans; wombat behaviour – including food preferences, mating habits and tolerance of other wombats ¬– also varies according to the season and whether the wombat grew up during a lush or drought time; much of wombat behaviour is learnt, some as an adult from other wombats, including but not limited to their mothers.

Wombat communication

There is a noise that all wombats make. It's roughly translated into English characters as

'Aaaaaarrrggghhhh ...'

I have noted another 17 wombat sounds: a throaty 'grrrhhh', and a loud 'ooomph' of a sniff that sounds as though the wombat has borrowed a vacuum cleaner hose for its nostrils; a 'heh heh heh' sound, a screech, a 'hff hff hfff' and many others.

My longest close association with a wombat is with the one I call Mothball. We have been together for 16 years now – by her choice, as she's free to go bush, and indeed did so for several years, coming back only as the 90s drought grew worse. At one stage I began to wonder if wombats might be telepathic – I once swore at her, for making demands during a very difficult time. I didn't raise my voice – but she vanished for 12 days. My voice was a quiet mutter but the pitch was angry.

Wombats do communicate. Wombats see the world by smells. This makes sense in a land that is dry, where a nicely positioned piece of dung can give out odours for weeks.

Wombats don't just use their sense of smell to track. For years I wondered why, wherever there is a wonderful view in the valley, there'd be a wombat 'sit' – a place where wombats literally sit and ... and what? Look at the view? They are too short-sighted. Watch for predators? Again, they couldn't see them ...

Then I realised. Wombats 'smell' a view the same way we see one. We look out and see a complexity of shapes and colours. Wombats sense an even greater complexity of smells – and like we put together all we can see to make up a view of a whole landscape, they can put all the smells together too, to experience that same landscape in their own way.

Wombats can show extraordinary intelligence – but only if they feel like it. If there is lush food about, many wombats will spend their spare time not conquering the universe, but sleeping. They use their intelligence only when they need to and for their own wombat purposes.

How many wombats exist?

As far as I know, apart from my own, there has been no census of bare-nosed wombats in this country, and none that compares wombats in the same area over several years of varied weather and that tracks wombats out of that territory, too.

When I began studying wombats we had approximately 97 wombats in a roughly five square kilometre area, though most of those lived in the far smaller areas near the creeks, especially during dry times.

In 2004 there were about 23 wombats in the same area. The numbers had been reduced, I suspect, mostly by mange and drought, and to some extent by competition with feral goats, though we have been able to keep that to a minimum in this particular area. There is no grazing competition from domestic animals here.

Numbers began to rise a few years ago as injured young were released as they recovered. Any figures I collect may now be misleading.

35 years ago we had two distinct wombat types here: one small, round-shouldered, pointed nosed, from mid-brown to an almost gold colour, though the latter was usually as the wombat's coat faded with age.

We also had another quite different type: massive, almost a metre tall at the shoulders, square-nosed, flat-backed, from dark brown, almost black, to an almost white grey.

How often do wombats breed?

Some wombats around here bear one young about every three years, but some females have borne only one in their life; one wombat had borne only two, while a wombat we named Two and a Half, seemed to bear one every eighteen months or even more frequently for eleven years or more – she was an adult with a baby at heel and one in her pouch when I first sighted her and began to keep notes, so she may well have had more young before that.

Drought or a lush year doesn't seem to have any effect on breeding – there are as many babies in pouches in droughts as there are in lush years.

When does the baby leave the pouch?

There seems to be no set time for a baby to leave the pouch or become independent. It varies enormously according to the temperament of both the mother and the baby, as well as the availability of food and holes. Hole availability is a major factor in breeding, I suspect – but only suspect. A young wombat can't safely range into new territory far away without holes or at least culvert pipes to shelter in at night – or farmer's sheds.

We assume that baby wombats become independent at between 15 and 18 months – but I've known one forcibly taken for a long walk by its mother and abandoned in distant unfamiliar territory at less than a year old, and another still hanging around with mum at two and a half years old. Most wombats don't go on heat again till the baby has left home completely, though this isn't always the case.

Do wombats mate for life?

A cautious 'no' on that one. I have known only two female wombats that mated with the same male all their reproductive lives. In both cases the male lived about half a kilometre from the female. The male moved closer when the female was in heat, and stayed nearby for about three weeks.

Are wombats really good diggers?

The 'little Aussie digger' is one of the great wombat myths.

Wombats dig instinctively. Most are superb diggers. But most are lousy engineers. Most 'new' wombat holes either collapse or are really new entrances to very old holes – perhaps hundreds of years old. I suspect the new holes that work are a matter of either luck or rare instinctive genius. Mother wombats teach their young how to dig for roots and how to enlarge their burrows. But I have never known a mother to dig a new major hole, or even try to, with a baby in her pouch or at heel – they just do some renovations.

Often humans assume a new hole has been dug because a new entrance has appeared. In all cases I've investigated here, the wombat has somehow sensed the existing labyrinth below and opened up a new front door.

Are wombats muddle-headed?

No. Wombats are single-minded. A wombat does not appear to multitask. If a wombat wants to scratch, it does. If it is running to safety it seems unaware of any other data till it has reached its objective – even if it's a car bearing down on it.

What size is a wombat's territory – or do they have territories at all?

There is no such thing as an 'average' wombat territory. Some wombats defend their land – or a small part of it – and don't like to share with other wombats. Others appear happy as long as another wombat is more than two metres away.

The area of land that a wombat wanders around most nights depends on how much tucker that land contains.

A wombat's range also depends on good hole-building country – a good bit of dirt bank by a creek may be almost a wombat city, but the wombats who shelter there during the day will roam far afield to get food.

Wombats mostly keep to the same territory and usually walk along the same tracks every night, except in grassy areas over which they wander as they eat, but they can range for several kilometres in a night, either to find a new place to eat or drink or to seek out other wombats or find a territory of their own – though I am not quite sure about the last.

Travelling wombats may seek out strange wombat holes to shelter in during the day. Even if another wombat is already in residence the resident wombat may allow the new wombat to shelter there, though sometimes they object. Some wombats can range for about half a kilometre in a night; I tracked one more than seven kilometres one night, and back again; others wander over no more than about fifty square metres.

A young male may travel more than ten kilometres – the furthest I have tracked one. Of 31 young males tracked, at least 18 travelled beyond the ten-kilometre territory I survey. At least eight of those returned at some stage in their lives, possibly all of them who survived.

How long do wombats live?

Around here wild wombats live to an average age of about fourteen, though deaths from what looks like old age around six to ten years are quite common. Hand-reared wombats, however, which demand and accept supplementary feeding in bad times, can live to twenty years, or I suspect much longer.

Most wombats here die in their holes, and most appear to die of a complication of mange, either general weakness or infection. I suspect kidney failure is also a major killer – many wombats near to death have loose or smelly stools. Interestingly, the hand-reared wombats here don't appear to suffer from arthritis as much as the wild ones, so I suspect there may be a genetic component to their susceptibility.

How aggressive can a wombat be?

Wombats vary in aggressiveness, just as humans do. Most wombats may growl or snarl but won't attack. Those that do attack often seem practised – a female may go for a male's testicles, a male may go for a female's side or ears, all wombats will go for the nose, and all will whip around and present their attacker with their bum, if possible – hard and bony and fairly invulnerable.

Wombats appear to have an instinctive battle plan, sneaking up behind their opponent so they can't be as easily smelled; chomping and backing away if it's a threat battle, or going for the neck, nose or testicles if it's a genuine

assault. It doesn't appear to be learned, as hand-reared wombats will follow the same procedure, but it's possible that hand-reared wombats may simply pick up the strategy quickly. Once it's been done to them they'll copy it.

What do wombats prefer to eat?

Mostly what they learn to eat as babies, but they will vary their diet enormously in bad times – the wombats at our place switched to fallen avocados, apples and pears in the 2003 drought. I would never advocate this as a particularly suitable wombat diet but it's worth noting that they ended the drought fatter than when it began, and with no mange. But when there is available grass they won't eat fruit.

Do wombats drink?

Yes, in hot times, but not if they get sufficient moisture from grass or dew. Wombats usually take the same path to water and drink at the same place. But I have noticed here that if there is a strange scent around from a dog they may avoid that drinking spot for days rather than drink where a dog has drunk or, in some cases, rather than cross a dog's track. But this varies, and wombats that are more familiar with dogs' smells seem less worried by a reasonably old scent.

Does mange mean death?

For years I believed that a well-fed wombat wasn't susceptible to mange, that it was only when they were forced out in daylight that their skin became irritated and mange was able to colonise. I now no longer believe this. Instead, I think that healthy populations can tolerate a certain level of mange infestation. It is only when they are under pressure – which can be from psychological stress as well as food stress or too much sunlight – that the mange increases to a level where the irritation is extreme. That in turn leads to less sleep, wombats go out in sunlight and vigorous scratching that breaks the skin and makes wounds that then become infected.

We may never eradicate mange, but if we can keep the level down with topical drenching with measured doses and supplementary feeding, then deaths from mange are not inevitable or even likely.

Wombat survival

So what are the most urgent needs if we are to understand and preserve this extraordinary species?

1. A complete moratorium on wombat culling.

2. An accurate census in various areas, over at least a ten-year period. It may also be possible to use satellite tracking to do a wombat census. Wombats leave tracks on roads, wallaby tracks and on dewy grasslands. Once you know when and where to look the signs are obvious. But the sign of a mange-infected wombat is also obvious: they stop more often to scratch. If a wombat stops every two metres or less to scratch it can be surmised that they have a severe mange infestation which needs treating.

3. Investigation of using dingo or coyote urine along roadways to keep wombats from grazing along the verges. This is effective in the US and northern Europe for keeping grazing species away from roads and traffic – and wombats appear to be extremely sensitive to the scent of a meat-eating predator, though again, not all wombats and not all of the time. But if it could reduce the road toll by even a third it would be worth it. Animal tunnels under new road systems should be compulsory and could double as drains.

4. Centralised wombat research so that it is impossible for National Parks to defend ignorant decisions.

5. Research into the role wombats and macropods play in preserving grass seed and microflora and fauna in drought. Wombat droppings survive for up to six years of drought, with grass seeds intact ready to sprout once it rains again. They may also preserve the soil bacteria and mycorrhizal associations needed to fix nitrogen from the air or for plant roots to absorb phosphorus and other elements in the soil more easily. There is just enough evidence to indicate that this does happen ¬– we need far more study to know how significant a role wombats, or for that matter macropods, can play in ongoing Australian soil health. The farmers who shoot wombats and 'roos may in fact be helping to destroy their land's future.

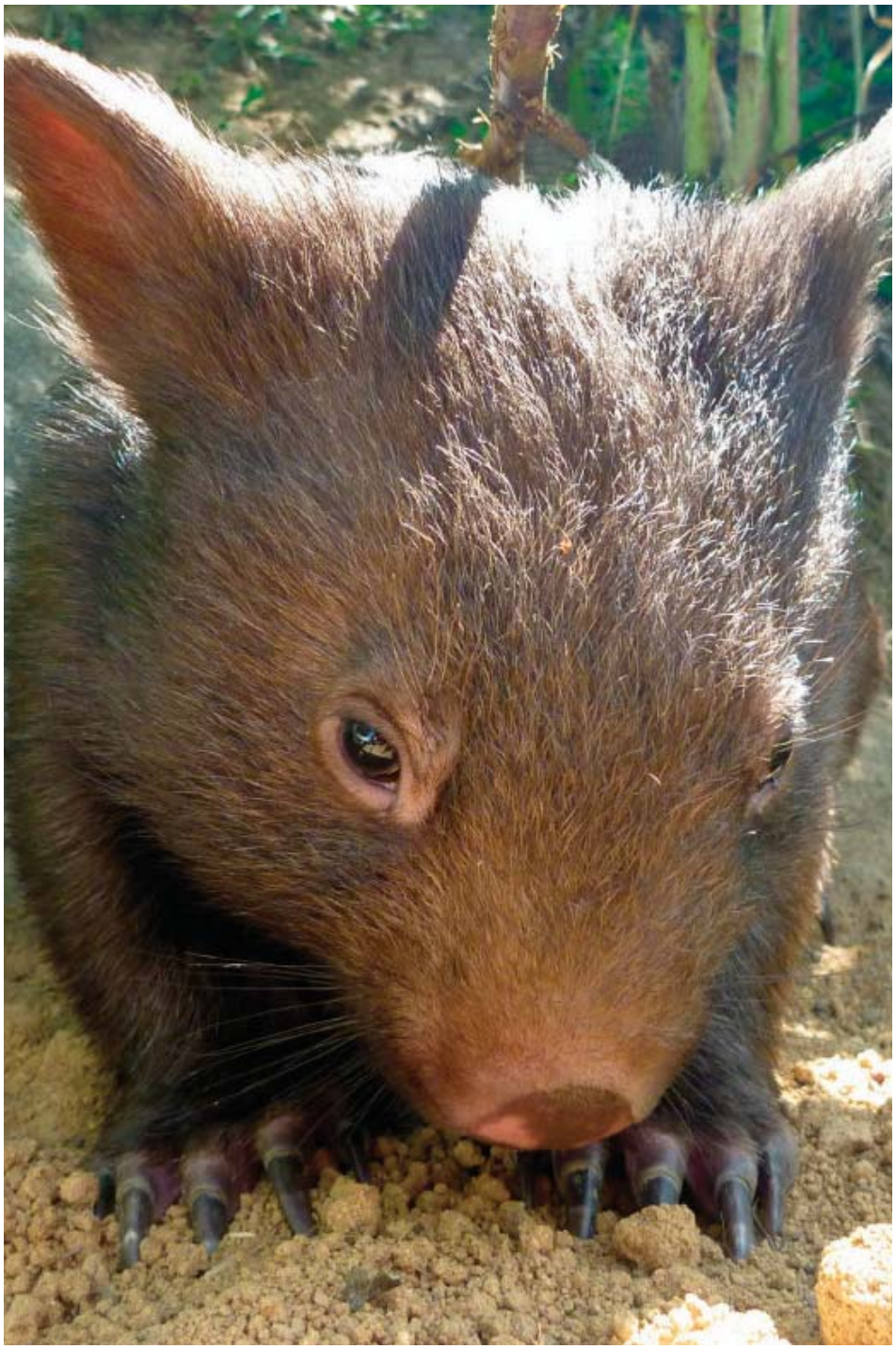
6. Campaign to pressure the National Parks and Wildlife Service to actively treat mange.

7. Make it illegal to keep wombats in enclosures smaller than half a hectare, except temporarily for research purposes. Instead, hand-reared wombats who appear too timid to be released into the wild could be kept in large reserves, where humans could be encouraged to wander at night, even helping to hand-feed perhaps, but sharing the extraordinary joy of being with a creature who is neither food nor pet, but as wild as a captive wombat can ever be.

Editor's note:

Jackie French's writing career spans 17 years, 148 wombats, 140 books, 23 languages, 3,721 bush rats, over 60 awards in Australia and overseas, six possibly insane lyrebirds, assorted 'Burke's Backyard' segments, radio shows, newspaper and magazine columns, theories of pest and weed ecology and 27 shredded back doormats.

Jackie and her husband Bryan live in the Araluen Valley, a deep valley on the edge of the Deua wilderness area, in a stone house they built themselves , with a home made waterwheel as well as solar panels to power their house (and computers). Their garden rambles over about four hectares, with roses dripping from the trees, 800 fruit trees, and about 270 different kinds of fruit (not counting 125 varieties of apple), so there is never a time when there aren't baskets full of fruit to pick. Jackie also describes herself as a 'wombat negotiator' and has spent three decades studying the wombats in her valley.



Benny

Marie and Ray Wynan, Jarake Flora and Fauna Conservation

A report came in on 10 Jan 2011 from a member of the public, a young wombat joey was sitting on top of his dead mother who had been hit by a vehicle along a remote cul-de-sac dirt road. A Native Animal Rescue Association (NANA) rescue team travelled out to the location just to find the little joey had disappeared, there was no sign of him anywhere and the rescue team eventually had to give up the search.

Our little Benny endured over a week on his own, fighting to survive, mourning his dead mother, starving as his diet was still 95 percent mother's milk. During this time on his own, he was also attacked (from goodness knows what) and the skin on his back was torn off, he had deep wounds around his neck and along his back.

NANA received a second phone call regarding the wombat joey, he had been found again. Unfortunately he had also now been run over by 4WD ag bikes. The person who found him picked him up and handed him in to NANA.

We received him the following day; he was in and out of consciousness for the first five days. He had three fractures in his pelvis and the wing bone was pushed downwards. He had infection in his wounds on his back, head injuries and pneumonia. Antibiotics and painkillers were used. X-rays sent to Dr Howard Ralph, a well known and fantastic wildlife vet who is always willing to help wildlife. Many hours of intensive care followed, carefully making sure he received enough marsupial milk, rest and medication. After five days we had the first "contact" with him looking in to our eyes, he was dragging his back legs behind when he tried to walk. At no time did he ever give up wanting to live. We were amazed at his incredible inner strength, so how could we as carers ever possibly give up!

Slowly his journey to recover started. His wounds healed, his fur started to grow back, his fractures mending.

Now, five months later, he is a happy healthy six kilogram boy. He has full movement in his back legs. He has thick black fur all over his back and he loves his milk. His best friend is Ruby, another orphaned wombat joey with another sad story, to be told at another time. Benny and Ruby will be in our care for at least another twelve months before they are ready to face the world as free-living wombats, the way nature intended.

"I have faith in you"

Best of friends, Ruby and Benny

Benny slowly healing

Exploring my first burrow

Orphaned at 350 grams. I have come a long way

Back where I belong

You are not my mum!

Marge, a female bare-nosed wombat

Kelly Wall

Kelly Wall is a 33 year old woman who loves wombats. She has worked in the animal industry for 13 years and is a qualified veterinary nurse and animal technician. Kelly currently works as an animal welfare project officer at Animal Health Australia. She has been a wildlife carer for over 11 years specialising in wombats for just over four years. The two wombats in these photos were in her care for 12 months coming in at 4 kilograms and successfully released at 26 kilograms.

Marge and Maggie

Marge, a female bare-nosed wombat

Leonie and Baz

Wombats are wonderful

Leonie Barrett

Ever since seeing an alternative housing book in the 70's, with a photo of a couple in Tasmania cuddling a wombat, I've been fascinated by these wonderful Australian marsupials. When I moved to the Bega Valley with my husband David, I was finally able to get up close and personal with a joey, and my ongoing love affair with wombats really began in earnest. We joined the Native Animal Network Association (NANA) in 1999 and, after undergoing some initial training and visiting experienced carers to see how they were set up, we were given the responsibility of caring for our first orphan.

Bea was a totally gorgeous little girl, full of strength and character. She was joined by Bill, who tragically sickened and died, but then along came Tish, a feisty little female. She was much smaller than Bea, but far more domineering and wise in the ways of the wild. They formed a close bond and went on to be released together. Other orphan wombats followed, with many colourful and memorable individuals, such as 'princess' Chloe 'the wombat who didn't like dirt'. She was a real challenge to rehabilitate and re-introduce to the wild, as she'd been kept in town, with limited space and outdoor experience, for far too long. I was glad we didn't have neighbours living nearby to see me down on my hands and knees giving digging lessons with my two front 'paws'!

Martha was the first wombat to be released on our property. She was an extremely sick and mangy little wombat, who was found barely alive one very hot dry summer. She was much older than our previous orphans, but severely underweight and dehydrated, as well as covered in ticks – I gave up counting after removing 400. I was so excited the first time she hissed at me a few days later, as it was her first real sign of life. After she settled in and started to thrive, we would go on long walks together of an evening, to familiarise her with our property and existing uninhabited or seldom used burrows. She also taught us that wombats can indeed swim. It's an extremely comical sight, as she would dog paddle frantically, but then she would slowly start to sink as soon as she paused.

Her release was a very gradual process, with occasional overnight stays away from the wompound (our outdoor wombat enclosure), which we left open for her to come and go freely once she was big enough. Then she would stay away for a few days before returning. This then extended to a week and then a month, with short return visits in between. Finally a year passed before she visited us for the last time. We think she went across the creek and into a nearby national park.

Our most recent wombats are Matt and Baz. They came to us 15 December 2007. We've seen Matt as recently as this week. He still remembers us as the source of rolled oats, to which he's rather partial on the odd occasion. My husband and I had gone outside for a night walk and Matt advanced quietly and purposely to administer a firm but friendly nip on my husband's leg. We haven't seen Baz since January, before the massive floods which inundated our area in February. We can only hope that he survived, although I believe that it's unlikely. He was much less tough, and far more dependent than Matt. He was rescued 5 July 2007 after his mother was hit and killed by a milk truck. He weighed just under one kilogram. Matt was found alone, and in very poor condition, on a bridge on a country road. He weighed around two and a half kilograms. He was paired up with Baz soon after being rescued. They were well bonded by the time they were passed on to us for rehabilitation and release on our property. We found it difficult to familiarise new territory to a bonded pair that we hadn't raised ourselves, as they would only follow each other rather than us.

We had to resort to gradually expanding fenced areas and supervising evening grass eating sessions. In mid February 2008 they managed to escape one evening and stayed out overnight. They returned when called the

Baz eating crimson rosella's sunflower seeds off a log

following evening. They were both very distressed, as they had been attacked - we assumed by a wild wombat. All the hair on Baz's bottom was gone, and Matt had hair missing too.

It took a long time to regain both hair and confidence, and neither were keen to venture far for quite some time. Both remained reliant on us for the security of proximity and supplementary food for the next year and a half. Last year we started to see them far less often and they seldom wanted any food from us. Gaining their trust initially, and being able to support them through a shaky start to their reintroduction to the wild, has been a wonderful experience. We're so lucky to have wombats living all around us here.

In between caring for wombats, I've studied in Canberra, and graduated in 2004 with a Bachelor of Education (Primary) degree. Currently I juggle casual teaching, childcare and checkout work, which involves a lot of time and travel, so I haven't been able to care for any more babies. I still help my native animal organisations in other ways. With my husband's help and support, I've also successfully raised and released a brush tail possum, some crimson rosellas, some tawny frogmouths, and an eastern spine bill, but bare nosed wombats remain my focus and passion.

My husband and I are keen to learn all we can about wombats, and to exchange knowledge and information with others. We joined the Wombat Protection Society soon after it was formed, and in February of this year we attended the three day Wombat Conference at Lake Hume. This was a wonderful opportunity to meet other wombat lovers from all around Australia, and we're still 'digesting' all the interesting topics which were covered.

Matt and Baz asleep near our door in the winter sun

The wombats are showing patchy multi-coloured fur that re-grew after wild wombat attack. Colour slowly evened out and became hard to distinguish

Side on close up view of Matt eating grass near our house

Matt and Baz in the "wompound"

Fourth Crossing Wildlife

Fourth Crossing Wildlife is the wild child of Linda Dennis, rehabilitator and wildlife teacher. As well as rescuing, rehabilitating and releasing all kinds of Australian wildlife - including wombats - Linda owns and operates the website Fourth Crossing Wildlife. At Fourth Crossing Wildlife, carers from all over the world who specialise in the rearing and rehabilitation of Australian native animals - as well as others who are keen to learn more about our wonderful wildlife - can find caring information, quality wildlife resources, photos and educational/entertaining stories written by wildlife carers from all corners of the wildlife community. You can find Fourth Crossing Wildlife at www.fourthcrossingwildlife.com

Above: Alu, a bare-nosed wombat rescued, rehabilitated and released by Linda and Todd of Fourth Crossing Wildlife. Photo: Linda Dennis

Tika the bare-nosed wombat waiting for mum to catch up during a wombat walk at Fourth Crossing Wildlife. Photo: Linda Dennis

Hiding in the grass at Fourth Crossing Wildlife, well trying too! Photo: Linda Dennis

Una and John Merrick

Wombat's teeth that are badly out of place. In once instance when we put the wombat out to fend for himself, they found that he actually was starving as he could not chew properly.

Above: Wombat with a burn caused by fencing wire. A group of school children at a bus stop on the Mt Donna Buang Road tied this little one up and left her for three days before she was rescued, the burns were so severe across her chest that the vets at Healesville cut the flesh out and stitched her back up. This picture shows her after the hair started to grow back. She grew up into a fine wombat showing no signs of her ordeal.

Left: Wombat of around 30 kilograms (now) with mange, we did manage to cure her with Cydectin over a period of time as she resided on a small organic vegetable farm where the owners were very happy to have her as she, unlike the rabbits, foxes, etc, ate no produce and lived happily down at the creek that ran through the property.

Robin Crisman

Jude, raised by Elizabeth Neville and since released at Cedar Creek Wombat Rescue

Mojo was about 600 grams when he was found by a member of the public after his mother was killed by a car. They kept him for a few days and brought him into Kulnura Veterinary Clinic when he wasn't doing well. He is presently about 12 kilograms and being cared for at Cedar Creek Wombat Rescue.

Roz Holme

Cedar Creek wombat in new pen

Lucky the wombat. After surviving being hit by a car and in a semi-coma for two weeks when she was young, Lucky suffered a severe dog attack several years after she was released and made her way back home. Months of care and she is once again healthy and released

Little Yango was found in Yango National Park. Poor mum had mange and was all but eaten by dogs. A lady who lived close by said Yango had been there for a few days with no one checking it at all. Roz and Kev Holme were in Yang National Park treating a wombat with mange and thought they should get the mother wombat off the road. The weather was very hot, and the mother appeared old so Roz didn't think any joey would live if she had anything in pouch, but Roz saw movement in the pouch as soon as the mother wombat was moved off the road. Kev and Roz cut the baby wombat out, finding he was very dehydrated, with a few dog bites on him. Yango, as he was named, was treated with fluids, then antibiotics. Once hydrated, he recovered well, and is now released on Kev and Roz's 200 acre property. Yango calls in for a quick "hi" every now and again. He has a small nick on his ear where the dogs tried to get him out of the pouch so Kev and Roz always know it is Yango when he visits. Photo: Roz Holme

Samantha Blunt

Samantha Blunt is 20 years old and lives in the Caboolture area. She has been interested in art all her life and has been drawing since a very young age.

Animals mean a great deal to Samantha, and her love for them inspired her to take art further and she began sketching seriously in 2008.

Samantha is now starting her own business, known as Furmiliar Faces, specialising in sketching people's pets, but she can also sketch wildlife if people desire it.

Samantha sketches for pet and wildlife organisations in order to assist them with raising awareness and funds to help save our beautiful animals.

Samantha can be contacted at: samblunt1@gmail.com

Tunna the wombat. Photo: Ron Co

A wombat called Tunna

An orphan wombat was found in its fatally injured mother's pouch. Stephanie Clark and Wayne White became the proud foster parents of a three-month-old baby wombat called Tunna. The pair named him Tunna after Tunnack, the area near where he was found.

Tunna weighed just 100 grams, he was smaller than a tennis ball, hairless, his eyes fused shut and his claws smaller than Wayne's finger nails.

Tunna now weighs seven kilograms and is thriving on around-the-clock care.

Stephanie and Wayne are long time wildlife carers. "We love and respect our wildlife - they need all the help they can get," Stephanie said. They have a humidicrib at home and a portable one that plugs into the car cigarette lighter. The couple are an integral part of the Bonorong Wildlife Park Friends of Carers (FOC) training program.

FOCs are people who are unable to devote 24 hours to caring for an animal but have the resources to rescue animals and transport them to vets and carers like Stephanie and Wayne.

Stephanie and Wayne teach FOCs how to rescue and transport injured orphaned animals.

Stephanie is the Tasmanian representative on the board of directors for the Wombat Protection Society of Australia.

The couple do not get financial assistance for their efforts; it is all out of their own pockets.

Tunna is just starting to munch grass and travels with the couple wherever they go because of his feeding regime.

The couple have two large pens on their 37 hectare property where they house and release orphaned and injured wildlife.

They have released Bennett wallabies, pademelons and a wombat in what they call "soft releases."

The couple open the gate of the big enclosure and the animals choose when to go.

Stephanie and Wayne feel very privileged to have not only helped Tunna but to have cared for him and despite the lack of sleep initially they say it has been a joy and delight to have him in their life. Tunna helped them to raise awareness as others have watched his journey through life.

For more wonderful photos of Tunna and other wombats visit the Red Bubble website where people can buy Tunna's calendar. All proceeds go to Wayne and Stephanie Clark http://www.redbubble.com/people/ronco/collections/15614-wildlife-rescue-and-care

Feet of a baby wombat. Photo: Wayne White

Tunna the wombat. Photo: Stephanie Clark

Wombat survivor

Photo: Sue Forrester

Sue Forrester was astounded to see this survivor sitting outside her burrow the day after the wildfires on Black Saturday 7 February 2009. The wombat was sitting outside a burrow in the smoke and heat, clearly mystified with where her home had gone. The ground was fiercely hot and the atmosphere was crackling. Looking more closely at this wombat, there appears to be a tick just beneath her eye, but the other white spots are bits of ash. She is still alive and thriving at Wombat Bend Sanctuary which is set in a small valley, within the larger Yarra Valley, which lies to the north east of Melbourne. Clearing of much of the region occurred in the early 1900s and, apart from the creek lines, little remained of any substance. They have a colony of bare-nosed wombats near the banks of the creek, which is exceedingly deep and steep sided, and was completely de-vegetated by the wildfires.

Photos: Geoff and Elaine Sands Emerald (Victoria)

A wombat named Narby

Narby was collected from the Narbethong/Healesville Road by Denise Garratt of Help For Wildlife. These photographs were taken about five days after he arrived on 10 March 2009 at a foster wildlife shelter. Narby was alone and had survived by himself for more than a month following the Black Saturday Bushfires of 7 February 2009. He was under four kilograms, looked like a bag of bones and had swollen feet. He was agro and wanted to bite all items including his teat on the bottle and a carrot - plus me! An excellent slow release result followed much later in 2010.

Young orphans that have grown up together enjoy a patch of winter sun. Photo: Gayle Chappell

The life and times of the northern hairy-nosed wombat

Linda Dennis, Regional Advisor WPSA

The northern hairy-nosed wombat *(Lasiorhinus krefftii)* is one of Australia's most mysterious animals. Only a hundred or so people have been lucky enough to see one in the wild, and there are none in captivity anywhere in the world.

Predator proof fence around Epping Forest.
Photo: Linda Dennis

In recent years, however, the northern hairy-nosed wombat has become just that little bit more known in Australia and around the world – but unfortunately for all the wrong reasons. It is Australia's second most endangered animal, the first being the Gilbert's potoroo of Western Australia.

The northern hairy-nosed wombat has the dubious honour of making it to more than one endangered listing:

- **Endangered** in Queensland under the Queensland *Nature Conservation Act 1992*
- **Endangered** nationally under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
- **Critically Endangered** internationally under the World Conservation Union's (IUCN) *Redlist of Threatened Species*, which lists species at a global level. (Department of Environment and Resource Management – (DERM). In fact, it makes it into the Top 10 of the world's most endangered animals.

Every two or so years a northern hairy-nosed hair census is carried out. Volunteers from all corners of Australia – and even the world – converge on Epping Forest National Park (Scientific) in central Queensland for two weeks to walk the length of the park, collecting wombat hair, measuring footprints and counting wombat poo.

The results of the 2007 hair census proclaimed that there are only 138 individuals left. Yes, you read that right – 138 northern hairy-nosed wombat individuals in the entire world. That's 13 times less than pandas!

But the fight is on to save this species from further decline.

The project to save the northern hairy-nosed wombat has been around for a long time, led by Dr Alan Horsup, Senior Conservation Officer with Queensland's Department of Environment and Resource Management. However, the last three years has seen a surge in activity after Xstrata donated a massive $3 million to assist in the translocation of some wombats from Epping Forest to the Richard Underwood Nature Refuge, near St George in southern Queensland to form a second colony.

A brief history of the northern hairy-nosed wombat

Fossil records show that the northern hairy-nosed wombat was once widespread, living in Victoria, New South Wales and Queensland (DERM). Since European settlement, however, the northern hairy-nosed wombat was known in only three locations: Epping Forest National Park in Central Queensland (where they can still be found), Deniliquin in New South Wales and the St George region in southern Queensland.

At the time of European settlement, the species already seemed to be uncommon. It is assumed that drought and grazing pressure from cattle and sheep accelerated the species' decline. It was extinct in the Deniliquin and St George areas by 1908.

What does the northern hairy-nosed wombat look like?

The northern hairy-nosed wombat is a heavily built animal with a broad head and a square-ish, fully furred nose. It has short legs and the feet are flat with strong, short claws. The front feet are built for digging burrows while the hind feet are longer and narrower and are used to shovel the dirt away.

The northern hairy-nosed wombat has soft grey-brown fur that can be softly mottled with brown or black. The length from its nose to its tiny little tail is around 1,020 millimetres and it can weigh up to 40 kilograms. Males are slightly larger than females.

What is the habitat of the northern hairy-nosed wombat?

Epping Forest National Park is semi-arid and dominated by brigalow (*Acacia harpophylla*) and gidgee (*Acacia cambagei*) on heavy grey, non-cracking soils. Deep alluvial sand deposits are present along an ancient watercourse, on the banks of which the wombats dig burrows. Wombat habitat is dominated by long-fruited bloodwood (*Corymbia clarksoniana*), Moreton Bay ash (*Corymbia tessellaris*) and Bauhinia (*Lysiphyllum hookeri*), with a grassy ground cover.

The burrow of a northern hairy-nosed wombat. Photo: DERM

Habitat at the Richard Underwood Nature Refuge has open woodland, dominated by *Eucalyptus melanophloia* with other canopy species such as *Corymbia tessellaris, Corymbia clarksoniana* and *Angophora melanoxylon* and there is the occasional stand of *Callitris glaucophylla*. The shrub layer is sparse. The grassy ground cover is mostly common native grass which is thought to be *Thyridolepis mitchelliana,* however *Pennisetum ciliare* (buffel grass) is dominate in the ground layer. Soils are mainly red loamy sand.

What is the behaviour of the northern hairy-nosed wombat?

The northern hairy-nosed wombat spends its day much like its cousin, the bare-nosed wombat. Long hours are

Hair Census team at the entrance of a northern hairy-nosed wombat burrow. Photo: Dr Alan Horsup

spent underground in a temperature controlled burrow, as the wombat cannot tolerate high temperatures. During long summer days, the wombat sleeps deep underground, emerging in the evening as temperatures cool to graze on grass. In the cooler months the wombat emerges earlier and may be seen sunning itself just outside the burrow entrance in the late afternoon.

Interestingly, the southern hairy-nosed wombat (the northern hairy-nosed wombat's closest relative) seems to have better temperature control and is often seen out of the burrow during the day time in temperatures as high as the low 30's (Celsius).

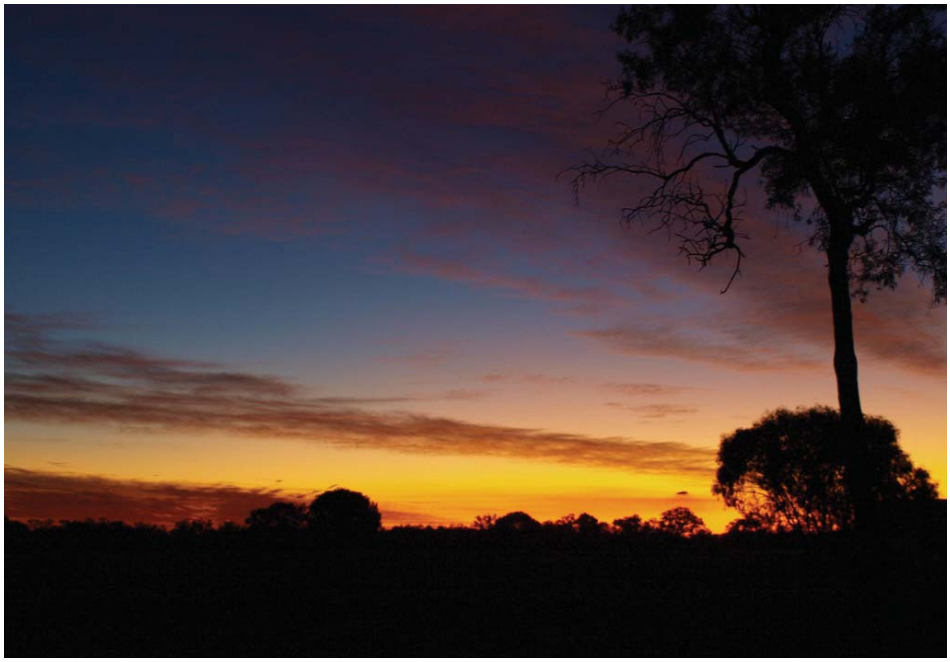
When does the northern hairy-nosed wombat breed?

Due to the elusiveness of the northern hairy-nosed wombat, information on breeding is vague and most information is gained from research carried out on the southern hairy-nosed wombat.

Epping Forest. Photo: Linda Dennis

Northern hairy-nosed wombat translocated to Richard Underwood Nature Reserve. Photo: DERM

Richard Underwood Nature Reserve. Photo: DERM



Sunset at Richard Underwood Nature Reserve. Photo: DERM

Wombat droppings. Photo: DERM

Wombats breed roughly every two to three years. Northern hairy-nosed wombat young are born in spring and summer – the wet season - and spend around ten to eleven months in the pouch. Young stay at heal until they are approximately 18 months of age.

It is thought that female young disperse from the mother's area to find a new territory, while males are tolerated and stay in the area for longer.

Threats for the northern hairy-nosed wombat

Competition with cattle and sheep, particularly during droughts, appears to have been the main factor contributing to the species' major decline around the time of European settlement.

Cattle have been removed from Epping Forest National Park, so grazing pressure from livestock is no longer considered a threat in the region.

In 2000 a pack of wild dogs entered the park - which was gazetted in 1971 - and killed at least nine wombats. In 2002 a predator proof fence was erected around the entire park to ensure that this never happened again. This will also ensure that wombats don't venture off the park to unsuitable or unstable habitats (DERM).

The Wildlife Preservation Society of Australia contributed funds to this program to provide security for the remaining wombats.

Current threatening processes are: loss of genetic diversity; small population size; disease and parasites affecting the health of the animals; wildfire and drought destroying food sources; and competition for food from eastern grey kangaroos (*Macropus giganteus*), especially during drought periods.

Conservation efforts for the northern hairy-nosed wombat

There is so much being done and already there have been major successes in the conservation of the northern hairy-nosed wombat.

After the wild dog attack, when a number of wombats were lost, there has been a slow but steady gain in numbers.

According to Dr Alan Horsup, in the mid 80's there were only believed to be

around 35 individuals left, all located within the Epping Forest National Park. The mid 90's saw an increase to 65 wombats, but the population was dominated by older individuals with males outnumbering females two to one. The first Hair Census in 2002 determined that there were 113 individuals, but not long after a pack of wild dogs invaded the park and at least nine wombats were lost. Thankfully, the number then increased to 138 in 2007 with a much healthier sex ratio, near even. A Hair Census was conducted in 2010, the results are currently being analysed.

This progressive increase is the result of numerous tasks within the northern hairy-nosed wombat recovery project.

As stated previously, in 2002 a predator proof fence was erected and 2005 saw the installation of a nine kilometre water pipeline with 15 automatic water points, along with feed stations dotted throughout the wombats range. Ongoing management of pasture in the park has also proven beneficial.

A caretaker program was established, where volunteers spend a month at a time at Epping Forest keeping an eye open for wombat mishap, collecting daily photo and video footage from the night vision cameras installed and generally maintaining the park and its infrastructure.

In July 2009 the first northern hairy-nosed wombats were captured and translocated by aircraft to a new location, the Richard Underwood Nature Refuge near St George in Queensland. Over five trapping sessions between 2009 and 2010 - managed by Dave Harper, Principal Project Officer with the Department of Environment and Resource Management - saw a total of 15 wombats moved. (Harper).

Sadly there were some losses, which can be expected in any radical translocation such as this. There are now 11 wombats at the reserve and, from video footage, it would appear that they are doing very well. Recent footage has revealed that there are two pouch young in the colony, which is a fabulous success to the project.

Hair Census 2007 volunteers processing collected hair. Photo: Linda Dennis

Bones of a northern hairy-nosed wombat. Photo: Linda Dennis

BUSHFIRE in the LANDSCAPE

Different Values, a Shared Vision

The Nature Conservation Council of NSW

Wildlife carers are all too aware of the immediate impacts of bushfire on native animals. Animals can be injured or killed by smoke inhalation or the radiant heat produced by fires. Even after the fire front has passed, some animals may starve or fall victim to predators because their habitat and hiding places have been removed temporarily by fire.

However, fire also plays an important role in maintaining healthy populations of our native wildlife. Fire has shaped Australia's environment for millions of years and many of our plants and animals have not only evolved to cope with fire but to exploit the opportunities it can create in the long term. It is not so much about whether fire is good or bad but about managing for appropriate fire regimes.

A fire regime includes the frequency (how often fire occurs), the extent (the patchiness of the area covered by fire), the intensity (how hot the fire is) and the season (at what time of year it occurs) of fire in the landscape.

Inappropriate fire regimes, usually too frequent to too infrequent, affect ecosystems adversely by altering community structure and composition. More than 400 plant and animal species are threatened by inappropriate fire regimes in NSW alone, according to the former NSW Department of Environment, Climate Change and Water.

Increased disturbance and fragmentation of Australia's landscape has resulted in a deviation from historical fire regimes which are important for maintaining biodiversity. As human settlement continues to encroach on bushland areas, fire has become one of Australia's most devastating natural hazards. This presents challenges in achieving a shared vision for fire management that takes the values of different sectors of the community into account.

The Nature Conservation Council of NSW's Bushfire Program has actively promoted ecologically sustainable bushfire management since 1984. The NCC held its eighth

Xanthorrhoeas flower after fire and provide a food source for birds, mammals and invertebrates. Photo: A. Miehs

biennial conference in June in Sydney. The theme of the conference was 'Bushfire in the landscape: Different values, a shared vision'. There were four streams based on four main values: biodiversity values, risk values, Indigenous values and rural production values.

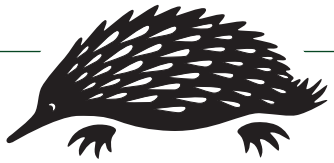
The conference explored how different values and land uses influence the application of fire in the Australian landscape and investigated the impacts this has had on biodiversity. The keynote speaker was Dr Alan York from the University of Melbourne who discussed how the Victorian Royal Commission findings (which called for increased hazard reduction burning) are impacting on biodiversity conservation. Facilitated sessions provided delegates with the opportunity to contribute to a shared vision for progressing ecologically sustainable bushfire management.

Please visit http://www.nccnsw.org.au/programs/bushfire for more information or contact Rebecca LeMay or Anne Miehs on (02) 9516 1488 or email: BushfireConf2011@nccnsw.org.au

Antechinuses are usually found in later seral stages (image of yellow-footed antechinus)

The common dunnart is generally found in early to mid-seral stages of post-fire recovery (2–4 years)

Membership Form



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"The challenge to the present adult generation is to reduce the increasing pressures on the Earth and its resources - and to provide youth with an education that will prepare them emotionally and intellectually for the task ahead.

SUZANNE L. MEDWAY
President

Jenny and Reg Mattingley

Maryknoll Wildlife Shelter, Tynong, North Victoria

Staff at Healesville Sanctuary dressing the wounds of Sheffield, a six month old female wombat with severe burns to her back. Her mother had been killed on the road and we have no idea how she got these burns. She was found the next morning trying to get back into her mother's pouch. The wounds were treated every three days at the start, and treatment went on for six weeks. It was very difficult keeping bandages on. Sheffield has recently been released as a healthy two year old weighing 23 kilograms. The hair that regrew was white and the most severely burnt area on her rump remained bald.

Scarlett was attacked by a dog after her mother was shot, resulting in severe wounds to her back and neck. She was gravely ill for some time as the puncture wounds had become infected. She also had many wound and dressing changes which had to be done under an anaesthetic. Once more the challenge of keeping the bandages on. The will to survive is remarkable with some of these orphans. It is amazing how they respond to love and care. The staff at Healesville Sanctuary is an integral part of wildlife care at our shelter in Victoria.

Shrek, a seven month old male wombat. Shrek had been cared for by a well-meaning member of the public for a month. As you can see, he had lost most of his hair and was very malnourished. He was not housed appropriately with only an old cardigan in the corner of the kitchen floor for a bed and a diet of only grass and muesli, no milk. Consequently, he was very stressed. The vets at Healesville Sanctuary diagnosed a fungal infection which was brought on by the stress of an inappropriate diet and not being housed correctly. With lots of TLC, a warm pouch of his own, and lots of wombat milk, he soon recovered. The next few months will be spent in the "finishing school", which is a large enclosure with deep underground burrows and is the final stage of preparation for release.

Digger, a seven month old male wombat. Digger's leg was broken when his mum was killed on the road. He had a full recovery and has since been released.