

rom the towering forests of the south-west to the ancient gorges of the Kimberley, Western Australia's national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, State forests and timber reserves encompass a wide diversity of ecosystems and landscapes.

These parks provide us with places for recreation and offer settings that enable us to revel in the beauty of grandiose scenery, to marvel at the intricacies of nature's sacred balance. Some are on the doorsteps of our cities, others are located in some of the most distant reaches of the State. They have been here for many lifetimes and provide the perfect backdrop for people to rediscover themselves, re-energise, to contemplate life in all its forms.

But today, as many of us live more removed from nature than ever before, just what value do our national parks and protected areas hold? How do they fit in with a booming economy, a seemingly unquenchable thirst for development and growth? Are they simply somewhere to visit on a holiday—somewhere set aside for our personal enjoyment? Or should they be shut off to preserve their

biological importance, to prevent us from trampling and loving these areas to death? Or does the answer, perhaps, lie somewhere in between? An examination of the values of such places gives us an answer.

The national park movement in Australia began in 1879 with the declaration of 'The National Park' in Sydney. However, this park was not about preserving wilderness, rather it

was about providing a groomed and tamed garden for human enjoyment. Some 7000 hectares were put aside for public recreation, river-side forest was hacked down to make way for lawns and deer and exotic birds and fish were introduced. Fast forward through the years and things have changed. Today more than 26 million hectares (9 per cent) of Western Australia is made up of national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, State forest and timber reserves, managed by the Department of Environment and Conservation. And more protected areas, especially marine parks and rangeland reserves, are in the pipeline.

Biodiversity value

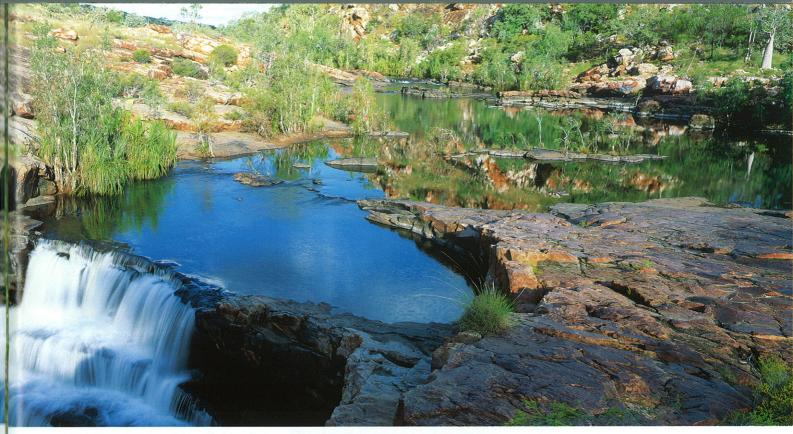
WA's protected areas are home to a kaleidoscope of different flora and fauna species, many endemic to the State. Scientists and people from many walks of life are coming to realise that WA has globally significant natural

Previous page
Main Elephant Rocks, William Bay
National Park, near Denmark.

Above Bell Falls, King Leopold Ranges Conservation Park, in the Kimberley. *Photos – David Bettini*

Left Track up Mount Frankland in Mount Frankland National Park near Walpole. *Photo – Rob Olver*







Left Gouldian finch.

Photo – Babs and Bert Wells/DEC

heritage. Collectively, we are responsible for caring for these plants and animals and the communities, landscapes and ecosystems in which they live.

Of the 220 terrestrial and marine mammals native to WA, 11 are already extinct. Of the remaining mammal species, 53 species, ranging from the tiny sandhill dunnart (Sminthopsis psammophila) to the enormous blue whale (Balaenoptera musculus), are formally listed as threatened. Another 43 bird species are at risk of extinction—the spectacularly coloured Gouldian finch, the tiny variegated fairy-wren and a whole list of majestic albatross species among them. Even hardy reptile species which inhabit the most

inhospitable areas of the State are under threat—22 species are declared threatened.

Then there are three frog species, six fish species and two shark species declared threatened, as well as long lists of insects, crustaceans, worms and snails.

Flora too is under threat. WA is home to about 12,000 species of flora, of which 14 species are presumed extinct and about 5000 species are endemic to the State. Flora is particularly vulnerable because many flora species are endemic, not only to the State but to a particular region—often a tiny corner of WA (see 'WA's national parks: home to a Noah's Ark of flora' on page 32). Should these areas become damaged, so too would

the endemic species that inhabit them. Who knows what as-yet-undiscovered medicinal properties such species may contain or what unstudied symbiotic relationships they may help to create.

But how do we place a value on the life of a flower or an animal? Is a cute, cuddly mammal more valuable than a creepy insect? And are flowers with dazzling blooms more worthy of our protection than their drabber counterparts?

To answer such questions you need simply to consider the intricate symbiotic relationships that exist between many WA flora and fauna species. Consider how an anemone fish receives protection from predators amid the anemone's stinging tentacles, and provides food to the anemone in return for the favour. Or how woylies eat truffles and spread their spores through the forest in their droppings, helping the truffles to spread and therefore flourish. Such fascinating and intricately balanced relationships show the importance of all species-not just those that prove pleasing to the eye.

By preserving the environments that harbour such species, we are also helping to provide clean air, clean water and a stable climate.

Recreational value

Parks and other protected areas provide aesthetically pleasing places for recreation. We turn to our parks when we're looking for scenic places to hike, swim, abseil or photograph. Such areas are also the scene of many treasured memories like camping expeditions, treks, picnics and family days out.

The enjoyment we humans gain from using national parks is key to their protection. While there are concerns we may be loving them to death, how are we to learn of the beauty of nature if we don't experience it? After all, the more people who appreciate nature, the more chance we have of saving it. You just need to look at the old-growth logging protests of the south or the upset over proposed development at Ningaloo in the north to realise it is the

Below The Pinnacles in Nambung National Park. *Photo – David Bettini* groundswell of opinion from everyday people that makes the difference in conserving our environment.

There is also benefit in enhancing the educational opportunities for people visiting our national parks. Interpretative displays can open visitor's eyes to the wonders of the landscape, be it about geology, flora or fauna. In this way visitors learn of the intricacies of nature, without feeling as though they've attended a lecture or classroom (see 'Interpretation: enriching the visitor experience' on page 50).

Health value

Parks in urban settings have been proven to encourage physical activity. Indeed, studies show that nature is a motivator for exercise (see 'Healthy Parks, Healthy People' on page 56).

The physical benefits of recreation are obvious—improved fitness and reduced obesity. This lessens the risk of the long list of diseases that are often associated with inactive lifestyles—heart

disease, stroke, obesity, type-two diabetes, elevated blood pressure, osteoporosis, certain cancers, depression and Alzheimer's disease. This is particularly significant when you consider 45 per cent of females, 65 per cent of males and about 25 per cent of children in Australia are considered overweight or obese. In fact, lack of physical activity is deemed second only to smoking as being the major contributor to death and disease in Australia. It is estimated that physical inactivity costs \$377 million and causes 13,000 deaths each year.

While more difficult to measure, the mental health benefits of spending time in nature are also significant. Studies show contact with nature promotes a raft of mental health benefits like reducing the risk of and improving the symptoms of mental fatigue and stress, reducing stress-related factors like blood pressure, lowering heart rate and muscle tension and increasing life satisfaction, life outlook and overall health and wellbeing.





Above Old-growth forest in Hawke Block. *Photo – Cliff Winfield*

Right Hawks Head, Kalbarri National Park. *Photo – Ann Storrie*

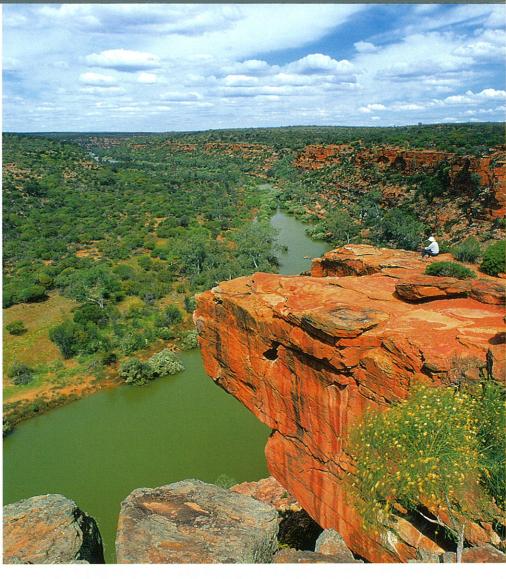
This is significant considering depression is currently the leading cause of non-fatal disability in Australia and affects 20 per cent of the population at some point in their lives. In 20 years, depression is forecast to be the leading cause of death and disability in Australia.

Economic value

In Western Australia, national parks and other protected areas attract about 11 million visits each year, making them integral to the State's tourism industry. A Sustainable Tourism Cooperative Research Centre study into the economic value of tourism in WA's national parks, marine parks and forests found such areas are worth millions to local economies.

The 2003 study focused on the Gascoyne coast region and the southern forest region and concluded that protected natural areas generated \$138 million on the Gascoyne coast and \$70 million worth of direct tourism expenditure in the southern forests. The southern forest region's tourism industry is growing following the introduction of initiatives stemming from the State Government's *Protecting our old-growth forests* policy.

The towering forests of the south and the dazzling shores of Ningaloo Marine Park are not just there to protect biodiversity and act as pretty asides to human development—they generate revenue. The same can be said of national parks and reserves across the State.



Protecting natural assets through national parks also aids many industries. In some parts of WA the natural vegetation in protected areas helps boost rainfall and control salinity, thereby helping the farming areas which may surround them. While it may be difficult to place a figure on such values, it is likely to be substantial.

Spiritual values

So, protected places help preserve ecology for us to admire, they provide places for recreation, they improve our physical and mental health and they offer economic benefits. But they also offer us something bigger and wider reaching than all of that.

People have a need to experience nature—a need that we often dismiss. And in today's time-poor society this is perhaps more important than ever before. National parks provide us with somewhere to take time out, reconnect with nature and recharge our batteries. Isn't there a special place in everyone's soul that yearns for contact with natural places, a collective sense of place?

Even if we are never to see them, isn't there something wonderful in the knowledge that special corners of our State are left untouched, havens for our plants and animals to thrive? These are places for all people and for all time.

When we visit or think about these places we gain an innate sense of just how important it is to protect our natural environment.



Samille Mitchell is a *LANDSCOPE* Editor and DEC Publications Officer. She can be contacted on (08) 9389 8644 or by email (samille.mitchell@dec.wa.gov.au).

John Bailey is the Chairman of the Conservation Commission of Western Australia. He can be contacted on (08) 9389 1766 or by email (johnba@conservation.wa.gov.au).

Peter Sharp is the Department of Environment and Conservation's (DEC's) Parks and Visitor Services Acting Director. He can be contacted on (08) 9442 0300 or by email (peter.sharp@dec.wa.gov.au).

Volume 23 Number 1 SPRING 2007 COntents

- Interpretation: enriching the visitor experience
 Interpretative signage, displays and facilities heighten visitor appreciation of an area's natural and cultural wonders. But how is it done?
- 56 Healthy Parks, Healthy People
 A program promotes the benefits of time spent in the natural environment.

Regulars

- 3 Contributors and Editor's letter
- 23 Bookmarks

 North-West Bound

 Phillip the Penguin

 Community Voices, Creating Sustainable Spaces
- 31 Endangered Noisy scrub-bird
- 48 Feature park
 Herdsman Lake Regional Park
- 62 Urban Antics

 Quendas in the park

Publishing credits

Executive editor Kaye Verboon. **Editors** Samille Mitchell, Rhianna King, Carolyn Thomson-Dans.

Scientific/technical advice

Kevin Kenneally, Paul Jones, Keith Morris.

Design and production Maria Duthie, Natalie Jolakoski, Tiffany Taylor.

Illustration Gooitzen van der Meer.

Cartography Promaco Geodraft.

Marketing Cathy Birch

Phone (08) 9334 0296 Fax (08) 9334 0432.

Subscription enquiries

Phone (08) 9334 0481 or (08) 9334 0437.

Prepress and printing Lamb Print,

Western Australia.

© ISSN 0815-4465

All material copyright. No part of the contents of the publication may be reproduced without the consent of the publishers.

Please do not send unsolicited material, but feel free to contact the editors.

Visit NatureBase at www.naturebase.net.

Published by the Department of Environment and Conservation, 17 Dick Perry Avenue, Kensington, Western Australia.









