

Wild Country

A NEW VISION FOR NATURE





Clockwise from above: Tasmania's Tarkine rainforest TED MEAD;
Great Sandy Desert TED MEAD; Map of vegetation types in Australia;
Coral reef KELVIN AITKEN / ANT PHOTO LIBRARY; Giant termite mounds on
Cape York's savanna BG THOMSON



Connecting people and nature

Imagine what Australia might be like in hundreds or even thousands of years time. Picture a vibrant, healthy continent with positive connections between land, people and wildlife – where humanity thrives in compatible partnership with nature... More than just a hopeful vision, WildCountry is well underway, providing a radically different approach to conservation that will give nature its best possible chance of survival in the future.

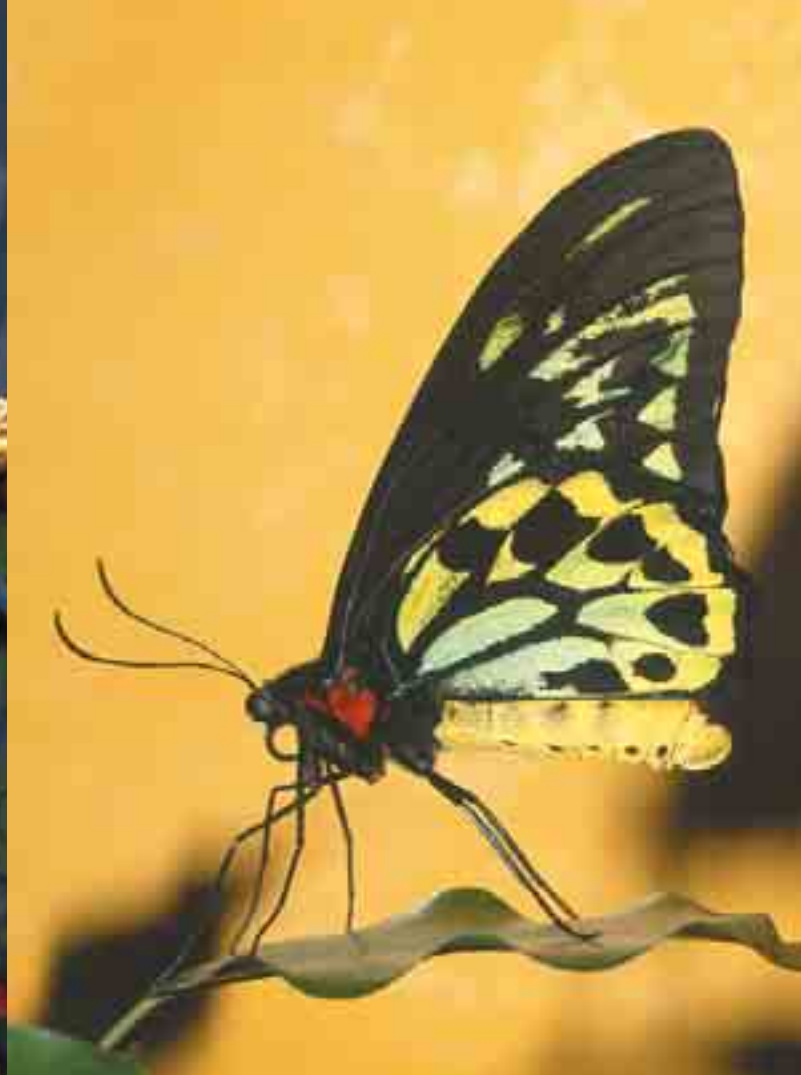
Australia is one of the most ecologically diverse countries in the world, home to a wealth of extraordinary wildlife. Yet in two hundred years we have lost more native species as a result of destructive practices than any other nation. Thankfully, we are still blessed with landscapes of superlative natural beauty and ecological integrity, but the pressures on these fragile lands and unique wildlife are intense – threats that are set to increase in the face of drought and global climate change.

In a world undergoing great change and environmental challenges, our natural world desperately needs a new approach – one that listens to and learns from nature. We need a change of perspective, from individual species and local areas, to the fascinating ways in which the continent works as a whole.

This kind of ‘big picture’ perspective provides a fundamentally different understanding of how nature works, based on connections – between species, habitat, climate and people – and how these change over time. Viewing nature in this way is vital if we are to build a positive future for Australia’s environment and people.

Using this new understanding of large-scale connections across the continent, WildCountry is developing a science-based, continent-wide approach to conservation planning to protect and restore our natural world.

Based on cutting-edge science and led by the community, the WildCountry vision is already unfolding across the country – offering new hope for the long-term health of the environment, wildlife and people of Australia.



Clockwise from above: **Rainbow Lorikeet** RAOUL SLATER; **Cairns Bird-wing Butterfly** DENIS CRAWFORD / GRAPHIC SCIENCE; **Lemuroid Ringtail Possum** ANDREW DENNIS / ANT PHOTO LIBRARY; **Thorny Devil** JIRI LOCHMAN / LOCHMAN TRANSPARENCIES



Australia's biodiversity: a global treasure

The plants, animals and ecosystems that make up Australia's biodiversity form one of the world's great biological treasures.

Globally recognised as one of 17 megadiverse countries that collectively hold around 70 percent of the world's flora and fauna,* Australia is home to an extraordinary number and variety of species.

But what makes Australia truly special is its number of endemic species – those that are unique to a particular country. Australia has more endemic animal species overall than any other country in the world.**

We have already lost so much of our spectacular natural heritage. According to the Australian Government's latest figures, 115 species – 61 plants and 54 animals – have become extinct in just 200 years of European settlement.

Conservationists and community groups have made a valiant effort over recent decades to halt this alarming decline. Yet, today 1,544 species are threatened with extinction, and the list continues to grow. Australia has more threatened reptile and amphibian species than anywhere else on Earth. A quarter of our woodland birds are in decline. Clearly a new approach is needed.

WildCountry's approach is based on the way the continent works as a whole and the connections between wildlife, habitat, climate change and people.

* World Conservation Monitoring Centre 2000.

** Conservation International 2000.

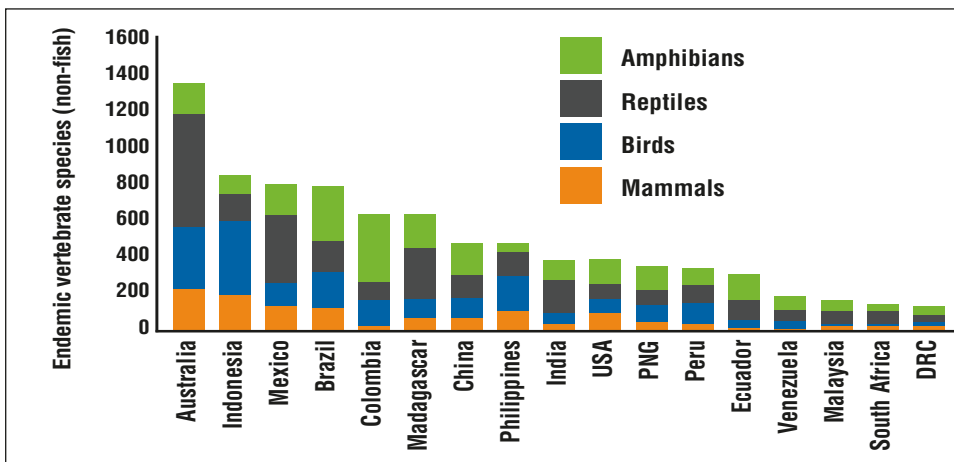


Figure 1: Number of endemic non-fish vertebrate species in 17 megadiverse countries, illustrating that Australia has the highest level of endemism for mammals, reptiles, birds and amphibians (PNG = Papua New Guinea; DRC = Democratic Republic of the Congo). Source: Conservation International (2000).

Profile: Quolls

Quolls are the largest marsupial carnivores on mainland Australia. These cat-sized mammals once roamed throughout Tasmania and the mainland.

In Eastern Australia, Tiger Quolls or Spotted-tailed Quolls are accomplished climbers and fierce predators. They routinely shimmy hundreds of feet up the trunks of giant old growth trees to hunt possums and gliders that live high in the canopy.

Slightly smaller, the other three quoll species – Western, Northern and Eastern Quolls – were once common and widespread, living in all habitats from deserts to forests across Australia. They feed on insects, small birds and mammals.

JIRI LOCHMAN / LOCHMAN TRANSPARENCIES



Now all species are threatened. Clearing of habitat, logging, poisoning campaigns and competition with foxes have all taken their toll.

All Quoll species have lost much of their natural range. As top predators, they play an important role in maintaining healthy ecosystems. If we succeed in implementing WildCountry science principles, the future for species like the Quoll will be much brighter.



Connections of a living continent

An ancient, diverse land, Australia's magnificent landscapes are linked by complex relationships that change over time. Permanent water in arid areas, pivotal to desert life, can be fed by springs from underground water tables that start as rain falling on mountains great distances away. Ecosystems on opposite ends of the continent can provide seasonal food sources for birds that migrate between them.

Consider the connection between the northern monsoon and Lake Eyre. Monsoon rains normally fall on Northern Australia's coastline. Yet every decade or two, cyclones pass deeper inland, sending floods down dry river beds right across Australia to Lake Eyre in South Australia. With uncanny knowledge, tens of thousands of water birds from around Australia make the journey to these giant wetlands to breed.

Much of Australia's wildlife and landscapes are linked in similar ways. With vast landscapes and a highly irregular and variable climate, such connections are pivotal to the health of the continent.

Australia is one of the fortunate places left on Earth where large-scale ecological connections still remain in place across huge areas. Understanding the connections between these landscapes is crucial in developing a new approach to conservation. The study of these connections, and other environmental 'flows' and ecological processes, is the science of landscape ecology, central to WildCountry.

Conservation must 'think big' in time and space, be based on connections and environmental variability, and be flexible. These understandings have formed the basis for a new vision for nature protection – WildCountry.

A fragile land

Australia has the least rainfall, the poorest soils, and is the most fire prone of any of the inhabited continents. Ecological connections in Australia are easily broken. Many of its remaining 'natural' landscapes and habitats are now fragmented islands within a sea of cleared, logged, mined, over-grazed and over-developed land, which offers little to sustain native plants and animals.

Loss of forests and woodlands has been extreme, with 92 percent of old growth forests destroyed and 85 percent of southern woodlands cleared. Unsustainable fishing, pollution, irrigated agriculture, introduced species and changed fire regimes have all taken their toll.

Landscapes and ecological connections may change radically in the future, particularly in the context of global climate change. We need to stop the current pattern of destruction but also plan for change. It is clear that unless we protect, link and restore intact ecosystems, many of our plant and animal species will not survive in the long term.



GETTY IMAGES

Profile: The Rainchasers

Everyone knows the humble Budgie, Australia's little native parrot, yet you may never have witnessed great wild flocks of Budgerigars wheeling like little green darts through the skies of inland Australia.

Budgies are prolific fliers. During dry times, they move to the coast seeking life-saving grass seeds. When the rains come, back they'll head, hundreds of kilometres inland.

Australia has dozens of species of these 'rainchasers' – millions of birds and some mammals that have adapted to move all over our continent chasing rain and the food it provides.

This is because one of Australia's distinctive features is not that we have droughts and flooding rains – but that we have lots of unpredictable droughts and then flooding rains at irregular times and in irregular places. To survive these unstable conditions, the rainchasers move big distances every year.

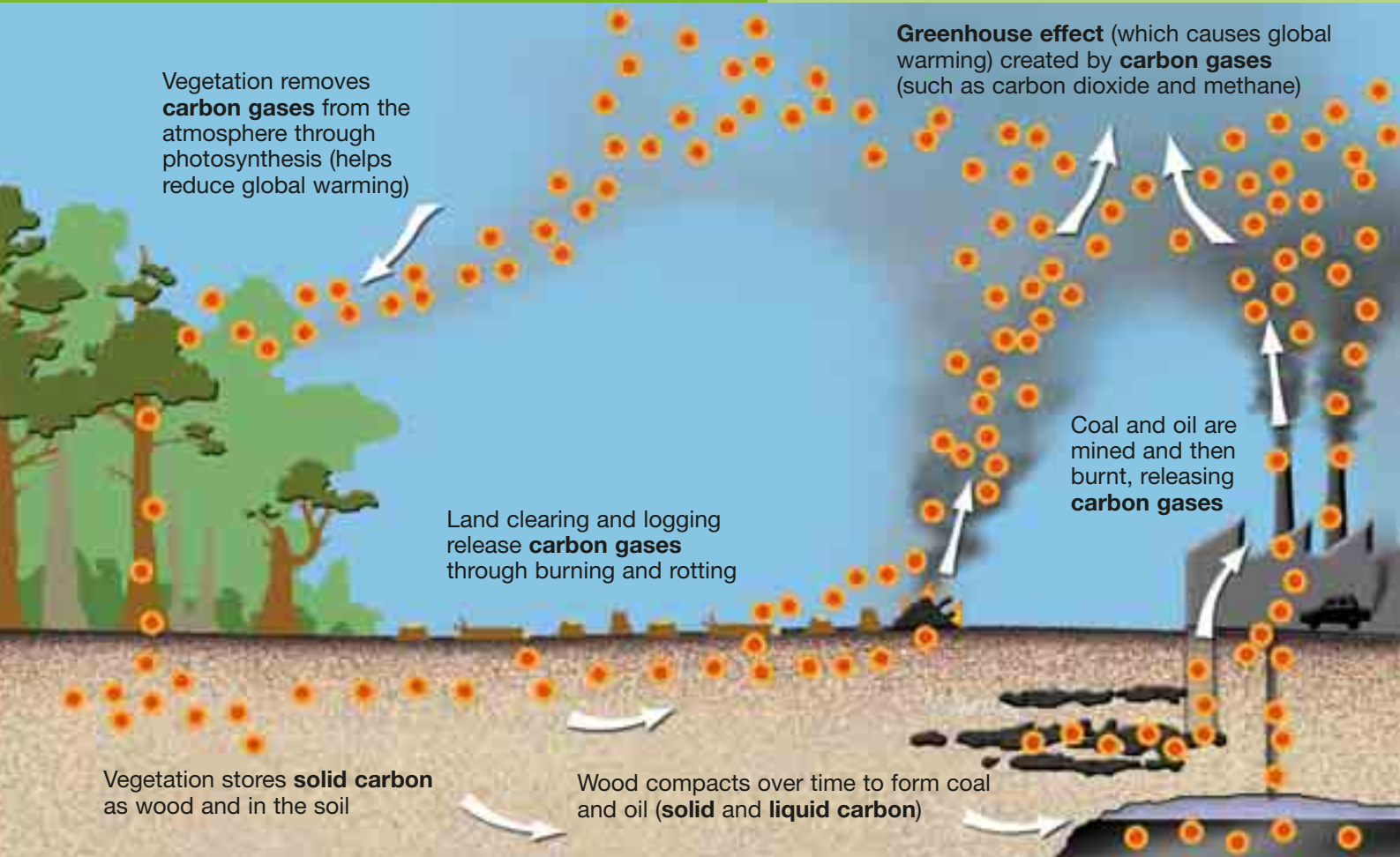
Australia's rainchasers highlight the need to manage Australia's environment as a single entity driven by ecological connections. The answer is not as simple as creating new national parks. While protected areas play an important role in protecting wildlife and our natural heritage, we need a new approach that maintains intact habitat across every region, giving rainchasers a place to live each year, no matter where the rain falls.



Budgerigar MARIE LOCHMAN / LOCHMAN TRANSPARENCIES

The Carbon Cycle

● Carbon (as gas, liquid or solid)
→ Movement of carbon through the carbon cycle



Above: The Carbon Cycle – keeping bushland intact and keeping fossil fuels in the ground will reduce global warming.

Below: The world's tallest hardwood trees, giant *Eucalyptus regnans* in the Styx Valley, Tasmania GEOFF LAW



Global warming and our future

Every week, new scientific papers and reports identify global warming as a huge threat to the Earth's wildlife and people. CSIRO has stated that global warming is already taking effect, and Australia will be affected more than most countries because of the fragile nature of our environment.

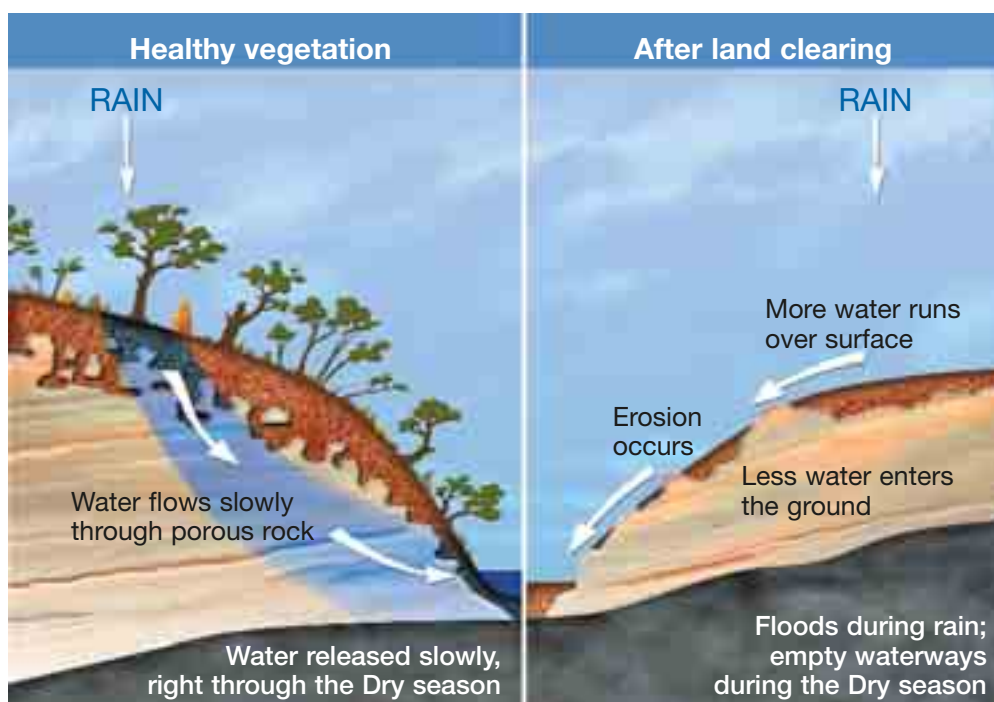
It is evident in the severity of Australia's last drought and the accompanying bushfires while, paradoxically, the intensity and number of high rainfall events is also predicted to increase. The 'land of drought and flooding rains' is destined for both droughts and floods on a much greater scale.

It is essential that we understand the role that different vegetation communities and ecological connections can have in buffering us from many effects of global warming. Australia's magnificent forests and bushland are a place of beauty and inspiration, home to a myriad of plant and animal life. But these landscapes also act as water filters, air purifiers and carbon stores. Logging and land clearing dramatically decrease precious water supplies and increase greenhouse pollution – a major contributor to global climate change.

Experts predict a mass extinction of the Earth's wildlife due to global warming. In early 2004, a comprehensive scientific report found that 18 percent of all species would become extinct if minimal climate change occurred by 2050. Animals such as the Mountain Pygmy-possum of the Snowy Mountains and the Lemuroid Ringtail Possum that lives in the mountaintops of the tropical north are particularly vulnerable.

Australia's world-heritage-listed Great Barrier Reef is under grave threat from coral bleaching. CSIRO scientists have shown that unless we significantly reduce greenhouse pollution, tropical coral reefs could disappear within 100 years.

At a time when the world is aware of these very real threats to our planet, there are many things we can do in environmental planning to help reduce the impacts on Australia's environment. Developing the cutting-edge science for this task is one of the central themes of WildCountry work.



The Daly River – connections between land, groundwater, river and wildlife.

Forest destruction and greenhouse pollution

Logging and land clearing of Australia's forests and bushland contribute immensely to the nation's greenhouse pollution. When trees are cut down or bulldozed, they release greenhouse gases, such as carbon dioxide, as they burn or rot.

The recent end to broadscale land clearing in Queensland – one of the biggest environmental wins in Australia's history – will not only save literally millions of native animals, it will also dramatically reduce greenhouse pollution. Each year's clearing released greenhouse pollution equivalent to the amount produced annually by all the cars and trucks in Australia.

The current annual logging rate of the giant *Eucalyptus regnans* in Tasmania's Styx Valley produces greenhouse pollution equal to the total emitted by all the cars in Tasmania approximately every six months.

Water – our most precious resource

Rainfall in Australia is already highly variable and rainfall patterns will alter with climate change. Minimising disturbance to rivers (such as dams and irrigation) and protecting native vegetation will be vital if we are to give our wildlife and plants the best chance of survival in a changing world.

Profile: The Daly River

Most of Northern Australia's rivers dry up during the long Dry season, yet the Daly flows all year round, keeping life abundant. The secret of the Daly's flow lies in its catchment of porous sandstone and limestone. Every year the catchment absorbs much of the rainfall during the Wet season. Like a giant sponge, this groundwater is then slowly released all through the Dry season.

Large-scale land clearing planned for the Daly catchment will directly destroy tens of thousands of hectares of savanna country. But the biggest impacts are likely to be indirect, caused by changes to connections between land, groundwater, river and wildlife. Bigger floods in the Wet and reduced flows in the Dry would threaten both the wildlife and people dependent on the Daly's constant flow.



WildCountry: protecting and restoring nature

In 1997, in partnership with some of Australia's most eminent ecological scientists, The Wilderness Society developed a concept for a continent-wide, long-term conservation plan for Australia. WildCountry is a completely new approach to nature protection in Australia, offering new hope for plants, animals and ecosystems facing an uncertain future.

WildCountry involves both *protecting* the best of what is left of Australia's natural environment and *restoring* important areas. But the critical difference with WildCountry is its focus on maintaining and/or restoring ecological connections in the landscape.

WildCountry aims to integrate the needs of nature with the demands of human use. Nature and humanity depend on ecological processes and environmental flows. These are the 'machinery of nature', the things that keep the environment working. They include water and nutrient cycles, soil formation, food chains, evolution and climate change.

The machinery of nature operates best in wilderness, but even multiple-use landscapes can maintain natural processes. This can be facilitated by rehabilitating these landscapes: restoring vegetation and water flows in farmland; voluntary conservation agreements that protect native vegetation on private land; land managed through traditional Aboriginal practices; and other land uses planned so that they are compatible with nature.

Over time, we hope that regional environment plans or conservation strategies will be developed for every part of Australia. They will form a continent-spanning, scientifically-planned network of WildCountry landscapes, with wilderness (the strongholds of nature) at its core, surrounded and linked by a combination of different protected and restored landscapes – depending on what is required. WildCountry is about working with communities to find the best solutions for a sustainable future for their regions.



Wildlands

WildCountry has been inspired by the success of a project facing an equally daunting task of protection and restoration in North America: the US Wildlands Project, which was started in 1992.

Traditional custodians

Indigenous peoples have inhabited Australia for more than 50,000 years. They are the traditional custodians of Australia's lands, seas and ecosystems. When Europeans settled Australia, Indigenous peoples were widely dispossessed from their country but they retain close links with, and important knowledge of, vast areas of Australia. We have much to learn from Indigenous Australians.

Indigenous land management practices have been overturned and, in some cases, irretrievably lost. In many examples, the loss of Indigenous land management practices now threatens species survival. Australia's Indigenous peoples, and their own vision of the future, are crucial to WildCountry.

Three generations of Wuthathi People, Shelburne Bay, Cape York

KERRY TRAPNELL



Clockwise from above: **Pig-nosed Turtle** G.SCHMIDA / ANT PHOTO LIBRARY; **Greater Glider** CYRIL WEBSTER / ANT PHOTO LIBRARY;
Leafy Sea-dragon KELVIN AITKEN / ANT PHOTO LIBRARY; **Frilled Lizard** TED MEAD; **Pink Cockatoo** HANS AND JUDY BESTE / LOCHMAN TRANSPARENCIES



WildCountry Science: a new picture of the continent

WildCountry is driven by new, cutting-edge science, based on understanding the large-scale and long-term connections in nature. It aims to solve environmental problems *before* they occur, and restore the ecological processes and environmental flows which sustain the long-term health of nature.

To do this, first we need to better understand these ecological connections, variability in climate and environment, and availability of food and habitat, in both fragmented and intact landscapes across Australia. Then we need to develop ways of incorporating this new understanding into conservation planning at national, regional and local scales.

WildCountry science analyses environmental data in a way never before attempted in Australia. Although some scientists have focused on elements of this research, WildCountry is the first attempt to put it all together, making it particularly valuable for conservation planning. Seven processes of ecological connectivity have been identified, which will be integrated into environmental planning:

- 1. Strongly interactive species:** for example, the role of predators in balancing populations of prey and, in turn, their impact on vegetation;
- 2. Hydroecology:** the links between water, vegetation and animals;
- 3. Long-distance biological movement:** for example, animals that migrate, are nomads or spend different parts of their life in different habitats;
- 4. Fire regimes:** understanding the role of fire as an ecological management tool;
- 5. Climate change and variability:** the impacts on species' distributions/habitat, and the ecosystem dynamics of global climate change;
- 6. Land/coastal zone fluxes:** how catchments transport water and nutrients from inland to coastal ecosystems;
- 7. Refuges:** habitats and connections needed for biodiversity in times of change, such as drought and climate change.



The WildCountry Science Council and Wilderness Society staff
THE WILDERNESS SOCIETY COLLECTION

“The long-term conservation of Australia’s rich biodiversity will not happen by accident. Rather, it will require the integration of committed networks of stakeholders in all regions with assessment and planning informed by the best possible scientific understanding, information and decision support. WildCountry provides an inclusive road map for advancing this complex but unavoidable agenda.”

Dr Brendan Mackey

WildCountry Science Council

Bringing together Australian and global experts in the disciplines of landscape and conservation ecology, the Science Council will provide leadership on WildCountry science and seek to involve the broader scientific community. The Council currently consists of:

Emeritus Professor Michael Soulé (Co-Chair)

Emeritus Professor Henry Nix (Co-Chair)

Emeritus Professor Harry Recher

Professor Hugh Possingham

Dr Brendan Mackey

Professor Richard Hobbs

Dr John Woinarski

Professor Jann Williams

Dr Rob Lesslie



Aboriginal Elder and Ranger, Tommy George, at the Giant Horse Gallery on Cape York Peninsula KERRY TRAPNELL

Building healthy communities

One of the key challenges is how to develop an economic basis for protecting nature; to find activities that promote the protection of nature rather than its destruction.

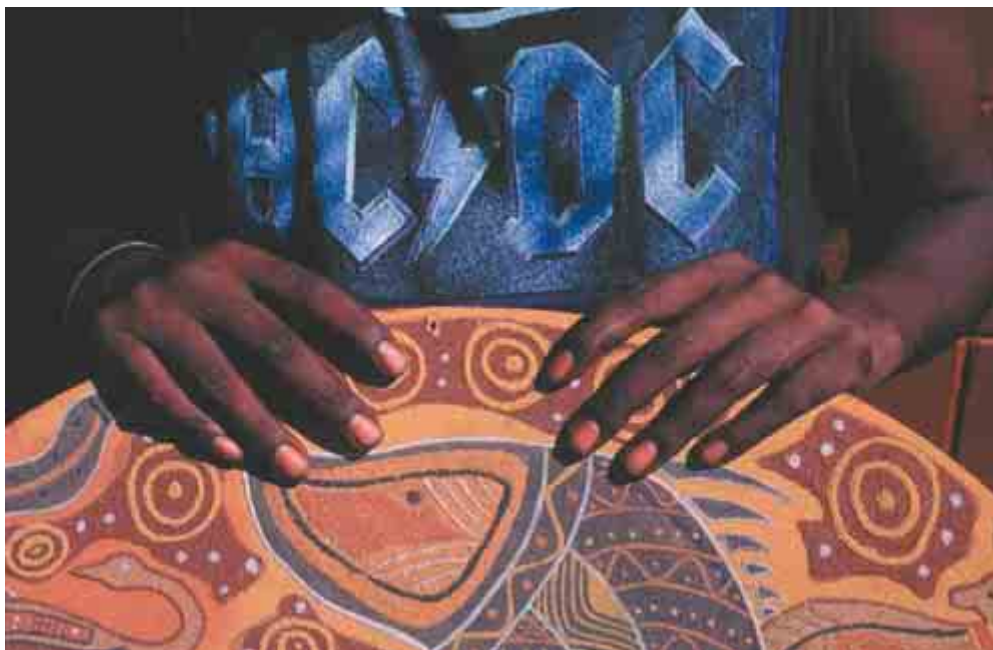
For **intact land**, the challenge is how to develop compatible economic activities that keep environmental disturbance to a minimum (see profile on right).

In **fragmented land**, the challenge is how to find economic mechanisms to make it viable to restore vast areas of country. For example, planting deep-rooted trees and shrubs over hundreds of thousands of hectares to control salinity and produce water and biodiversity benefits.

Cooperative relationships with local and Indigenous communities, land-holders, governments, scientists, and other conservation groups, are vital to WildCountry's success. Indigenous and rural communities are the main custodians of vast areas of Australia. A key aim of the program is to work with these communities to ensure an economic future that is ecologically positive.

Australia's **Indigenous** people, and their own vision of the future, are crucial to WildCountry. The WildCountry vision supports the return of traditional lands to their Indigenous custodians, plus the support of Indigenous conservation strategies. We must learn from Indigenous ecological knowledge and skills in nature management.

WildCountry aims to develop sustainable economies that are compatible with nature; alternative economies that are not dependent on damaging the environment and which benefit Indigenous and rural communities. The WildCountry vision is the core of all The Wilderness Society's work and WildCountry principles are already being implemented in key areas around the country.



Nathaniel Michael, Sand Painter, Hopevale, Cape York Peninsula KERRY TRAPNELL

Profile: A conservation economy

The Cape York WildCountry initiative provides an historic opportunity for the region's community and environment to coexist and prosper together. In addition to a strategy for long-term protection, the program will seek to establish:

- Ongoing management of protected areas that will bring together Indigenous and non-Indigenous knowledge about caring for the land and provide employment opportunities for the local community;
- A capital fund and a skilled unit to spearhead the development of a 'conservation economy' in the region. Support strategies will be required for emerging environmentally sensitive industries – including art and cultural products, conservation management, scientific research, tourism and recreation, alternative building and energy generation, plus ecologically sustainable cattle, fishing and forestry industries.



Gondwana Link



South-western Australia is well recognised for its rich ecological diversity. Tens of millions of years of evolutionary processes across some of the Earth's oldest land surfaces have produced four times as many plant species than are found in all of the rainforest across Northern Australia and down the continent's east coast to Tasmania.

Intensive agriculture has heavily fragmented these ecosystems. An alliance of environmental and other community groups is working to achieve the Gondwana Link vision. Gondwana Link aims to restore ecological connectivity from the woodlands of the Goldfields, through the Fitzgerald River and Stirling Range National Parks, to the karri and jarrah forests of the south-west tip of the continent – a distance spanning approximately 1000 kilometres.

Gondwana Link is a cooperative effort between Greening Australia, Australian Bush Heritage Fund, The Wilderness Society, Fitzgerald Biosphere Group and the Friends of Fitzgerald River National Park. Strong interest is being shown in the project by local Indigenous groups. Each organisation contributes in ways which match their expertise.

The audacious vision, the scale of the work and the collaborative nature of Gondwana Link make it an excellent example of WildCountry's philosophy and approach. The work of the WildCountry Science Council and the connectivity principles they developed have helped Gondwana Link to carry out conservation planning at a range of scales, so that this vision can become a reality.

Visit www.gondwanalink.org for more.



Western Pygmy-possum JIRI LOCHMAN / LOCHMAN TRANSPARENCIES

“Rare plants and animals are important, like rare stamps. But a rare stamp collection can't run a postal service.”

**Nathan McQuoid,
Greening Australia (WA)**

Ecological wonderland

South-western Australia is one of the world's 25 'biodiversity hotspots for conservation priorities'. Covering only five percent of the Australian land mass, this area has an estimated 8,000 plant species – more than one-third of Australia's known flowering plants – including some of the most unusual plants on Earth. Of these, 75 percent are endemic to the south-west and around 30 percent are yet to be scientifically described. So much more is yet to be learned about this ecological wonderland.

Profile: The Western Pygmy-possum (*Cercartetus concinnus*)

During the day these tiny possums curl up in a nest of gum leaves in a tree hollow or in the fringing leaves of a grass-tree. At night they emerge to chase insects and drink nectar.

Western Pygmy-possums prefer habitats with a dense shrubby understorey that provide food and shelter. They are most abundant in the mallee, woodlands and forests of south-west Western Australia.

While small remnants of bushland can provide suitable habitat, they may not be large enough to support viable populations of Pygmy-possums and other ground mammals in the long term.

Gondwana Link is linking together the remnants of bushland scattered across the wheatbelt of Western Australia. These connections will enable previously isolated populations to link together – making them less prone to local extinction.



Cypress Pine at Googs Lake, Yumbarra Conservation Park, Yellabinna, South Australia BILL DOYLE

South Australia's Western Wilderness



The west of South Australia contains large tracts of high value wilderness, including the Yellabinna system which is the largest stretch of relatively undisturbed mallee in the world. There are both acacia and eucalypt systems which stretch from the centre of the Eyre Peninsula into Western Australia. The area also includes more fragmented landscapes in the grain belt of the central and western Eyre Peninsula, and the arid pastoral zones in the spectacular Gawler Ranges and further north. These

link to the Great Australian Bight, with the world's longest south-facing shoreline, where natural values have only begun to be explored.

Yellabinna alone is home to some 686 perennial plant species and has one of the richest reptile faunas for an arid region in the world. However, the greatest ecological value of Yellabinna lies in its relatively undisturbed nature, and its large size and unique position. Yellabinna spans the transition zones between the mallee ecosystems of eastern and western Australia, and links the mallee ecosystems in the south to the acacia woodlands in the more arid north. It therefore contains many species that are at the extreme limit of their range – a vital factor for species migration and survival.

The WildCountry approach in the 21-million-hectare Western Wilderness Corridor will consider this diverse landscape as a functioning whole. A first step is to get full protection of core high conservation areas such as Yellabinna. Then, to build on innovative restoration programs (such as species reintroduction, revegetation and feral animal control), already underway on the Eyre Peninsula as a path to protecting and restoring this great landscape.



Malleefowl MARIE LOCHMAN / LOCHMAN TRANSPARENCIES

Smart adaptations

To flourish in Australia's semi-arid and nutrient starved landscapes, native plants have developed an amazing array of survival mechanisms. Many eucalypts grow as mallees, which are effectively trees with the trunk kept underground, safe from fire. The upper branches are structured so as to harvest the sparse rainfall and deliver it directly to the root system, which often penetrates into the ground deeper than ten times the height of the above ground section.

Profile: The Malleefowl (*Leipoa ocellata*)

When the rains come to the southern mallee country, Malleefowl begin renovating their nesting mounds. These giant piles of leaf litter and sand – some over 70 feet in circumference – begin composting and producing heat to incubate their eggs.

Malleefowl are the only mound-building birds that have adapted to building nesting mounds which compost in such dry conditions. Once a common bird across southern Australia, land clearing and competition with rabbits, sheep and cattle have drastically reduced their numbers.

The Yellabinna Wilderness in South Australia – ungrazed and uncleared – remains an important stronghold for Malleefowl.



Northern Australia: the last wild frontier



The lands and seas of tropical Northern Australia are universally recognised for their natural and cultural significance. Covering an immense region of 100 million hectares, Northern Australia has the world's largest remaining tropical woodland. It is one of the last great wild regions on Earth.

Home to a stunning array of plants and animals, plus abundant marine life, the North includes a variety of different environments that have evolved in

response to the wet/dry monsoonal climate.

Despite the intact nature of Northern Australia's vegetation cover, there are significant emerging threats. In total, 16 bird species, mostly grass-seed eaters, are in decline. The Gouldian Finch and Golden-shouldered Parrot are now highly endangered, and regional extinctions of small mammals are continuing.

The current wave of extinctions underlines the fragility of life in the monsoonal tropics, plus the need for an entirely new pattern of economic development and conservation strategies that work in harmony with these cycles. In many parts of the North, Traditional Owners are significant land holders and have strong aspirations to both live on and to manage their country.

Northern Australia provides us with an opportunity to learn from the experiences of land management in southern Australia – to ensure a long-term future for the region's stunning landscapes and wildlife, and to devise a developmental path that delivers a diverse, prosperous, sustainable and equitable future for the region.

To begin this process, the WildCountry Science Council has commenced a study of ecological processes, connectivity and threats to biodiversity. This analysis will be a crucial start to ensure the protection and maintenance of nature in the North.



Barramundi WADE HUGHES / LOCHMAN TRANSPARENCIES

“WildCountry is about keeping the country connected. We need to keep the trees standing and we need to keep the rivers flowing freely...”

**Lyndon Schneiders,
Queensland Campaign Director**

Profile: Barramundi (*Lates calcarifer*)

Barramundi are probably Australia's best known native fish. At home in the big rivers of the North, 'Barra' are an icon of our pristine northern wetlands. They are important predators, and prey, in the complex food webs of northern rivers, and of course are well known as a table fish and a fighting sportsfish. But their unusual life cycle is not so well known.

The most extraordinary fact is that Barra all start out as males. They reach maturity at around three to four years old and then, at about five, they change gender and become females. This means small Barra are almost all male, with the percentage of females increasing with age.

As young fish, Barramundi mostly live in the upper freshwater reaches of rivers. They are lovers of snags and overhanging banks, where they lurk and wait for prey. As they mature, larger Barra move downstream entering the highly productive estuaries and mangrove ecosystems close to the sea.

At over a metre in length, they are one of the top order fish, feeding on smaller fish and crustaceans. However, they also form a major prey item for Saltwater Crocodiles – and human anglers. Protecting our wild northern rivers will ensure that Barramundi populations are maintained for the survival of the ecosystem and for Indigenous and white fishermen – an important part of a sustainable economy for Northern Australia.



Above: One of many remote waterfalls and magnificent wild rivers across the Peninsula KERRY TRAPNELL
Below: Lotus lilies burst into life as lakes and billabongs are swollen by monsoonal rains KERRY TRAPNELL



Cape York Peninsula: a rare tropical wilderness



Cape York Peninsula is a vast 14-million-hectare area of monsoonal wilderness landscapes, home to a huge abundance and diversity of life. It is one of the last places on Earth where a mosaic of dense mangroves, magical rainforests, rolling savannas, wild rivers, endless woodlands and teeming wetlands remain intact.

Protected in the past by its remoteness, today the relentless march of destructive human development threatens this magnificent region.

Cape York has been home to Aboriginal and Torres Strait Islander peoples for millennia, back to a time when a land bridge connected Australia and New Guinea. Today's Aboriginal residents, living in remote and far-flung communities, face extreme social and economic difficulties. These communities retain a storehouse of knowledge that is crucial to the long-term management and protection of this precious environment.

An independent scientific assessment, released in 2001, concluded that "Cape York Peninsula has characteristics and features that are globally, regionally and nationally significant in respect of all eight natural heritage criteria: geoevolution, geodiversity, bioevolution, biodiversity, natural integrity (naturalness), ongoing natural processes, contribution to knowledge and aesthetics."

The Wilderness Society would like to see the development of a visionary plan for the future of Cape York that protects its World Heritage values and encourages and supports a better quality of life through the creation of a 'conservation economy' on the Peninsula.

"The challenge for the people of Queensland and Australia is to forge a direction for the future development of Cape York Peninsula that does not repeat the mistakes of other parts of the nation or elsewhere in the seasonally dry tropics of the world. Patterns of development are needed that protect the integrity of natural processes, and that are environmentally and socially responsible. Given the national and global significance of this area, anything less will be an historic tragedy."

– Natural Heritage Significance of Cape York Peninsula
(Queensland State Government 2001)

Profile: The Palm Cockatoo (*Probosciger aterrimus*)

This extraordinary and charismatic parrot is found only on Cape York Peninsula and similar habitats in New Guinea. Yet its behaviour on the Peninsula is unique – needing both savanna and rainforest to survive. The Palm Cockatoo feeds on the large seeds of rainforest trees but nests in the hollows of termite-riddled eucalypts in adjoining savanna.

In Australia, the Palm Cockatoo has developed complex territorial displays, beating the hollow branches of eucalypts with specially shaped sticks to make resonating sounds.



C&D FRITH



Heathland, Lower Glenelg National Park, Victoria ERN MAINKA

The Tristate WildCountry Vision (VIC, NSW & SA)

Stretching across the borders of three states and covering nearly a thousand kilometres, this region encompasses the transition from wetter temperate systems into the more arid centre of the continent. A complex mosaic of woodlands, wetlands and forests provide habitat for a range of mammal and bird species that have disappeared from much of Australia. In the wheatbelt, gigantic blocks of mallee wilderness spread from horizon to horizon and provide a refuge to numerous semi-arid species. In the north, the extensive floodplains of the Darling system cut through a vast landscape of intact mallee, saltbush and the continent's most extensive casuarina woodlands.

Aboriginal people have a long and continuing connection with this country, and hold a range of aspirations around ownership and management of land and water. Well recognised sites include those dating back over 40,000 years at Lake Mungo in NSW and the Budj Bim aquaculture farms in Western Victoria.

In southern areas historical land clearing has fragmented much of the landscape and a substantial protection and restoration program is required across both public and private land. In intact northern areas, issues include inappropriate fire regimes and stressed river systems. Discussions are underway with a broad range of organisations, including Trust for Nature, Greening Australia and local community groups, to develop a shared vision to inform conservation plans across this vast, diverse landscape.



Regent Parrot DAVE WATTS / LOCHMAN TRANSPARENCIES

Profile: The Regent Parrot (*Polytelis anthopeplus*)

Regent Parrots are one of the spectacular sights of the mallee country. Bright green and yellow, these elegant birds are usually seen in small flocks weaving between the trees, en route to and from their favourite feeding sites.

They have evolved very specific requirements for feeding and breeding. In the dry country of NSW, Victoria and South Australia, Regent Parrots nest in the large deep hollows only found in larger woodland trees, especially River Red Gums along the Murray River and other inland wetlands. However, they often feed in very different habitat – on the seeds and fruits of grasses and shrubs in the low mallee country on less fertile soils.

To maintain healthy populations of Regent Parrots, retention of remaining tall woodlands and adjacent mallee is required. In areas which have been highly cleared, replanting of corridors to link isolated bush remnants will help their survival. Work is already progressing for Gondwana Link in Western Australia, but the same scale of work is urgently needed in the mallee country of south-eastern Australia.



WildCountry in action – Gondwana Link. Clockwise from above: Job Future’s Green Corps team leader Wayne Walker planting trees at Chereninup Creek Reserve; Gondwana Link coordinator Keith Bradby and a local landholder; Keith Bradby talks about Gondwana Link at the launch of Chereninup Creek Reserve AMANDA KEESING



The future of Australia's magnificent wild places and unique wildlife is in all of our hands. We have already lost so much of our natural heritage and today, the threats to the diversity of life on our planet are greater than ever.

Together, we must work to give nature its best possible chance of survival. Based on cutting-edge science and led by the community, WildCountry's approach offers new hope for the long-term health of our fragile continent.

The Wilderness Society's strength and success is entirely due to the participation and generosity of concerned people – both in Australia and around the world.

Your support is vital if we are to build a positive future for the environment, wildlife and people of Australia.

“What really interests me about WildCountry is that it is trying to tackle the larger issues of what it actually means to conserve and restore something on a large enough scale to make a difference.”

Professor Richard Hobbs

“The WildCountry vision is unashamedly ambitious. It is to protect and restore not just small patches of country, but entire ecosystems, along with the ecological processes that drive and underpin them, and involving every element of Australia’s biodiversity, in each part of the country. So this is an inspirational vision not just for the next few years, or decades, but for the next few centuries and beyond.” – Virginia Young, WildCountry Coordinator

www.wilderness.org.au

Protecting, promoting and restoring wilderness and natural processes across Australia for the survival and ongoing evolution of life on Earth.

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