

# *Protecting the* **Kimberley** **wilderness**

Western Australia's vast, wild and beautiful Kimberley is one of the world's last great wilderness areas. The state government has released a bold plan to conserve the region's immense natural and cultural values and, with it, a record investment in conservation of an initial \$63 million budget over five years.

by *Carolyn Thomson-Dans, Jacinta Overman and Daryl Moncrieff*

**T**he Kimberley region is a national biodiversity hot spot and its marine environment is internationally renowned as one of the world's most unspoilt and ecologically diverse. It has some truly awe-inspiring landscapes, from the beehive formations of Purnululu World Heritage area to such spectacles as the Horizontal Waterfalls in the Buccaneer Archipelago.

The region also offers less tangible but no less important values. A great many people all over the world feel a spiritual connection with the Kimberley and desire to protect it, even if they have never been there. As American novelist and environmentalist Wallace Stegner so eloquently put it:

"Something will have gone out of us as a people if we ever let the remaining wilderness be destroyed... We simply need that wild country available to us, even if we never do more than drive to its edge and look in."

The state government's bold vision for this region's long-term conservation—the Kimberley Science and Conservation Strategy—was released in June 2011. Many of the strategy's major initiatives are already underway.



### Landscape-scale conservation initiative

Parts of the far north-west Kimberley are among the least disturbed environments in Australia. There are no recorded mammal extinctions from this area. However, the rugged and remote nature of the Kimberley does not mean the region has remained undisturbed. The spread of cattle and major changes to fire regimes have caused the most obvious impacts on the natural environment. Feral donkeys and other introduced pests have compounded these effects. Feral cats are thought to be causing significant impacts on native species and introduced cane toads recently arrived in the region. Weeds have been introduced to, and taken hold in, many

parts of the region. Global climate change is also likely to affect the region, with significant increases in both average rainfall and temperatures projected to occur in the Kimberley during the next few decades.

All of these threats and disturbances cut across property boundaries and affect parks, pastoral lands, Aboriginal lands and other areas alike. So, the most effective conservation strategy in the Kimberley is to protect, maintain and restore ecosystems at a whole-of-landscape scale, regardless of tenure. The Kimberley Science and Conservation Strategy has therefore taken a tenure-blind approach. This means managing threats—such as fire, introduced animals and weeds—cooperatively across property boundaries and in partnership with traditional owners and key stakeholders including pastoralists and the Australian Wildlife Conservancy, to increase the resilience of ecosystems across the whole landscape. The government has committed \$21.5 million over five years for this landscape conservation initiative, with ongoing funding of \$5.5 million per year.

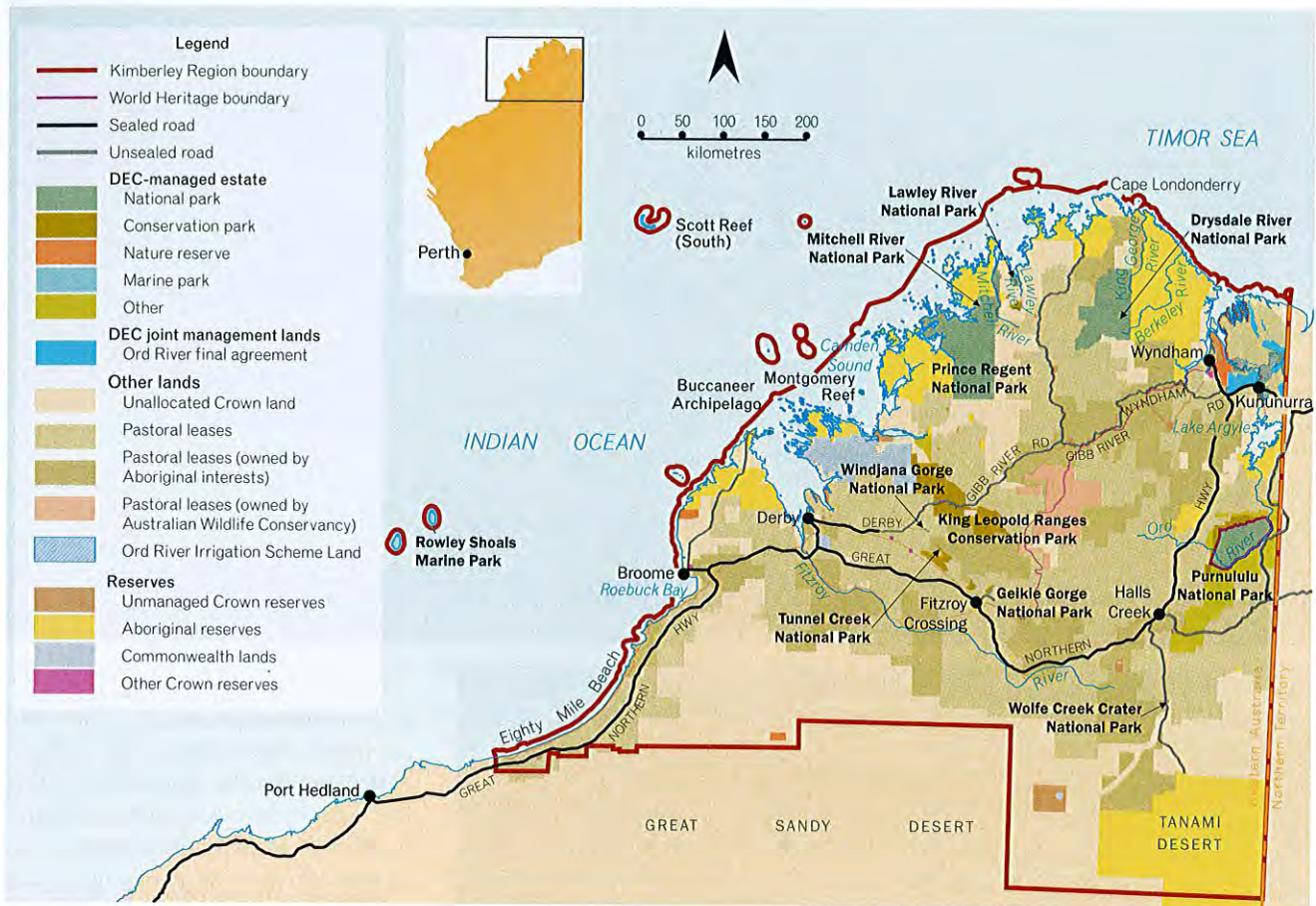
One of the most significant initiatives under the strategy addresses the greatest threat to the biodiversity of the region—bushfires. Large and intense fires in the late dry season have caused changes to vegetation structure such as loss of overstorey woodlands, soil erosion and declines in native animal populations. Often these fires rage across hundreds of thousands of hectares because, once started, and in the heat of the dry season, they are almost impossible to contain. This is



*Previous page*  
Bonaparte Archipelago in the north-west Kimberley.  
Photo – David Bettini

**Above** Releasing a northern quoll captured in a biological survey.  
Photo – Lesley Gibson/DEC

**Left** Prescribed burning is undertaken in areas such as Silent Grove in King Leopold Ranges Conservation Park to control fuel levels.  
Photo – Ed Hatherley/DEC



particularly the case in the rugged parts of the region. Not only are these fires on a grand scale, they often occur in the same areas year after year, providing insufficient time for plants and animals to recover.

The Department of Environment and Conservation (DEC), in collaboration with traditional owners, the Kimberley Land Council, Aboriginal ranger groups, the Fire and Emergency Services Authority, pastoralists, the Australian Wildlife Conservancy and other partners, is developing and applying improved fire management strategies. Contemporary science is being integrated with traditional Aboriginal knowledge to restore nature's balance and create a mosaic of burnt and unburnt areas in the late wet and early dry seasons. The resulting patchwork effect from these prescribed burns reduces the amount of fuel available and therefore reduces the risk of large, intense and damaging fires later in the dry season. This is a mammoth effort across almost 20 million hectares of land and it is estimated that it will significantly reduce the amount of carbon released into the atmosphere every year.

Planning for these expansive seasonal fire management and introduced animal and weed control projects will be reviewed annually. On-ground works have already started.

### Expanding the reserve system

The centrepiece of the Kimberley Science and Conservation Strategy is the creation of the Kimberley Wilderness Parks, one of the most significant environmental initiatives in Western Australia's history. The Kimberley Wilderness Parks will include the state's largest interconnected system of marine and terrestrial parks, covering 3.5 million hectares stretching from the seaward edge of the proposed Great Kimberley Marine Park (see page 36) through the new Prince Regent National Park to the remote Drysdale River National Park.

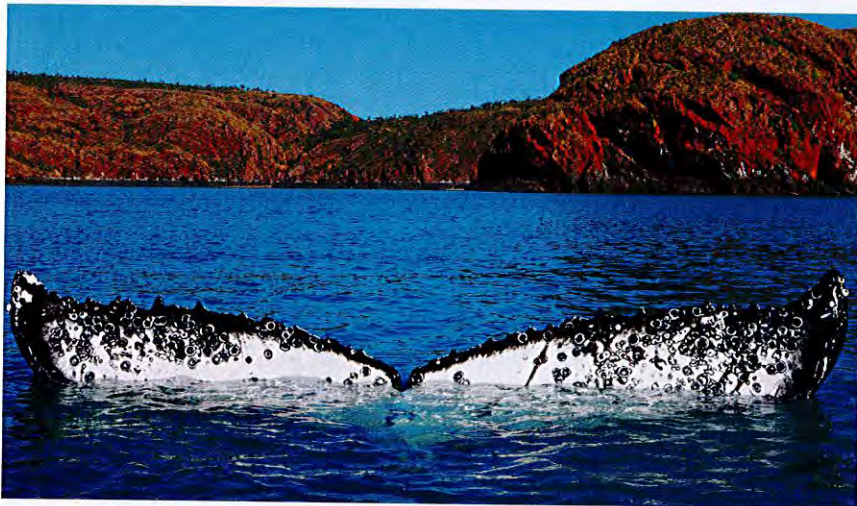
The government has already made significant progress on this initiative. The unclassified Prince Regent Nature Reserve has been upgraded to a class 'A' national park, in order to provide the highest level of protection to this internationally recognised area. The 635,000-hectare park is home to more than half of the mammal and bird species

found in the whole Kimberley region and more than 500 plant species.

At the heart of the Kimberley Wilderness Parks, the new Prince Regent National Park—WA's 99th national park—protects many areas of scenic grandeur, including Kings Cascade, Pitta Gorge, Mount Trafalgar and Python Cliffs. Prince Regent River runs almost straight for most of its length, often between near-vertical cliffs. The adjoining Camden Sound Marine Park will create a continuous terrestrial-marine reserve system. The park has no facilities or road access, but many private boats include Prince Regent River on their itineraries during coastal cruises.

A conservation park will also be created in the Willie Creek Wetlands on Yawuru Aboriginal lands, to be jointly managed with the Aboriginal owners. DEC and the Miriwung-Gajerrong traditional owners will also move to protect the globally significant flatback turtle rookeries at Cape Dommert at the mouth of the Cambridge Gulf, by adding the area to the jointly managed Ord River Nature Reserve.

There are more than 2,500 islands off the Kimberley coast, spectacularly



**Top** Talbot Bay, Buccaneer Archipelago, Kimberley.  
*Photo - David Bettini*

**Above** A resting humpback whale.  
*Photo - Micheline Jenner*

beautiful places with plunging sea cliffs, tropical vegetation and secluded beaches. Most importantly, they are refuges for wildlife, wildflowers and ecological communities, many of which have disappeared from similar areas on the mainland. This is because the islands have mostly been spared from disturbances such as fire and introduced animals such as cattle. Unlike other parts of WA, at present few islands in the Kimberley are conservation reserves. The strategy will protect priority Kimberley islands through reservation and joint management arrangements with traditional owners.

### Marine protection

Four new Kimberley marine parks are proposed under the Kimberley Science and Conservation Strategy at Camden Sound, North Kimberley, Roebuck Bay, and Eighty Mile Beach. These new multiple-use marine parks will protect 48 per cent of Kimberley coastal waters, and almost treble the area of marine parks and reserves in WA, from approximately 1.5 million hectares to 4.1 million hectares.

The proposed Camden Sound Marine Park is the biggest calving area for humpback whales in the southern hemisphere and is rich in other marine life, ranging from coral reefs and mangrove forests to turtles and dugongs. Most visitors to the proposed marine park arrive aboard cruise vessels. Passengers take part in activities such as sightseeing, appreciation of Aboriginal

cultural sites and fishing. The spectacle of the massive Montgomery Reef emerging from the sea on a falling tide is a significant tourist attraction with the water cascading from the reef top and the abundant range of wildlife that is regularly observed.

The Camden Sound and North Kimberley marine parks will be managed together as the Great Kimberley Marine Park. Great Kimberley Marine Park will extend from Montgomery Reef in the south to Cape Londonderry in the north and will cover more than 17 per cent of WA waters, making it Australia's second largest marine park in coastal waters after the Great Barrier Reef Coast Marine Park.

The proposed Roebuck Bay and Eighty Mile Beach marine parks are two of only a dozen or so areas in the world with huge intertidal flats rich in shorebirds. These amazing areas offer summer refuges to hundreds of thousands of migratory waders, protected under international agreements, that fly from as far away as Siberia. The marine park in Roebuck Bay will be managed jointly with the Yawuru traditional owners.

The state government has already released indicative management plans for Camden Sound and Eighty Mile Beach marine parks. It has provided new funding of \$15.2 million over four years with ongoing funding of \$3.7 million each year for management and compliance activities in both marine



parks. This is in addition to new funding of \$1.1 million over four years for a Kimberley marine education program for recreational fishers and charter operators.

### Extending visitor experiences

The national parks and reserves of the Kimberley collectively attract about 300,000 visits each year. People visit the Kimberley to experience what our parks have to offer, and depart with memories of wild and spectacular places that are found nowhere else in the world. As well as protecting natural landscapes, wildlife, heritage, Aboriginal rock art and other sites of cultural significance, Kimberley parks also support a valuable and expanding nature-based tourism industry.

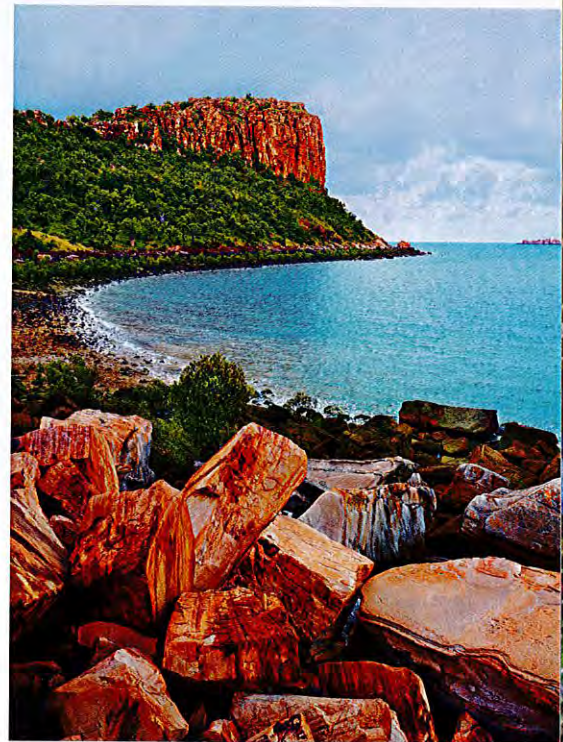
Thus, an important objective of the strategy is to increase the range and amenity of ecotourism experiences across the Kimberley. The government is providing new funding of \$9.6 million over four years for tourism initiatives in the Kimberley including development and promotion of new tourism corridors and assistance for Aboriginal communities to identify and develop nature- and culture-based tourism services. The first new tourism corridor—Gibb River Road to Kalumburu—has already been identified and will be developed in conjunction with traditional owners and other stakeholders, including pastoralists and tourism operators.

Mitchell River National Park, King Leopold Ranges Conservation Park, Purnululu National Park and Windjana Gorge National Park will all benefit from improved camping, picnic, interpretive and other facilities. Site improvements have already been completed at Geikie Gorge National Park, with support from the Bunuba people, and at Tunnel Creek National Park.

Works to protect the highly visited Mermaid Boab Tree in Prince Regent River National Park, through the construction of a boardwalk, have also been completed with assistance from the Unguu rangers. The boab tree at Careening Bay is inscribed with the words 'HMC MERMAID 1820' and is an important relic of the voyages of Lieutenant Phillip Parker King, the first person to accurately chart the Kimberley coast in the *Mermaid* and the *Bathurst*.

### Indigenous management of country

Today, there are 22 Aboriginal language groups across the Kimberley, a reflection of the region's diverse and living Aboriginal culture. Aboriginal people have inhabited the region for up to 60,000 years, and with other Indigenous Australians have the oldest continuing cultures in human history. The region has an exceptionally high Indigenous population, with 47.7 per cent of Kimberley residents being of Aboriginal or Torres Strait Islander



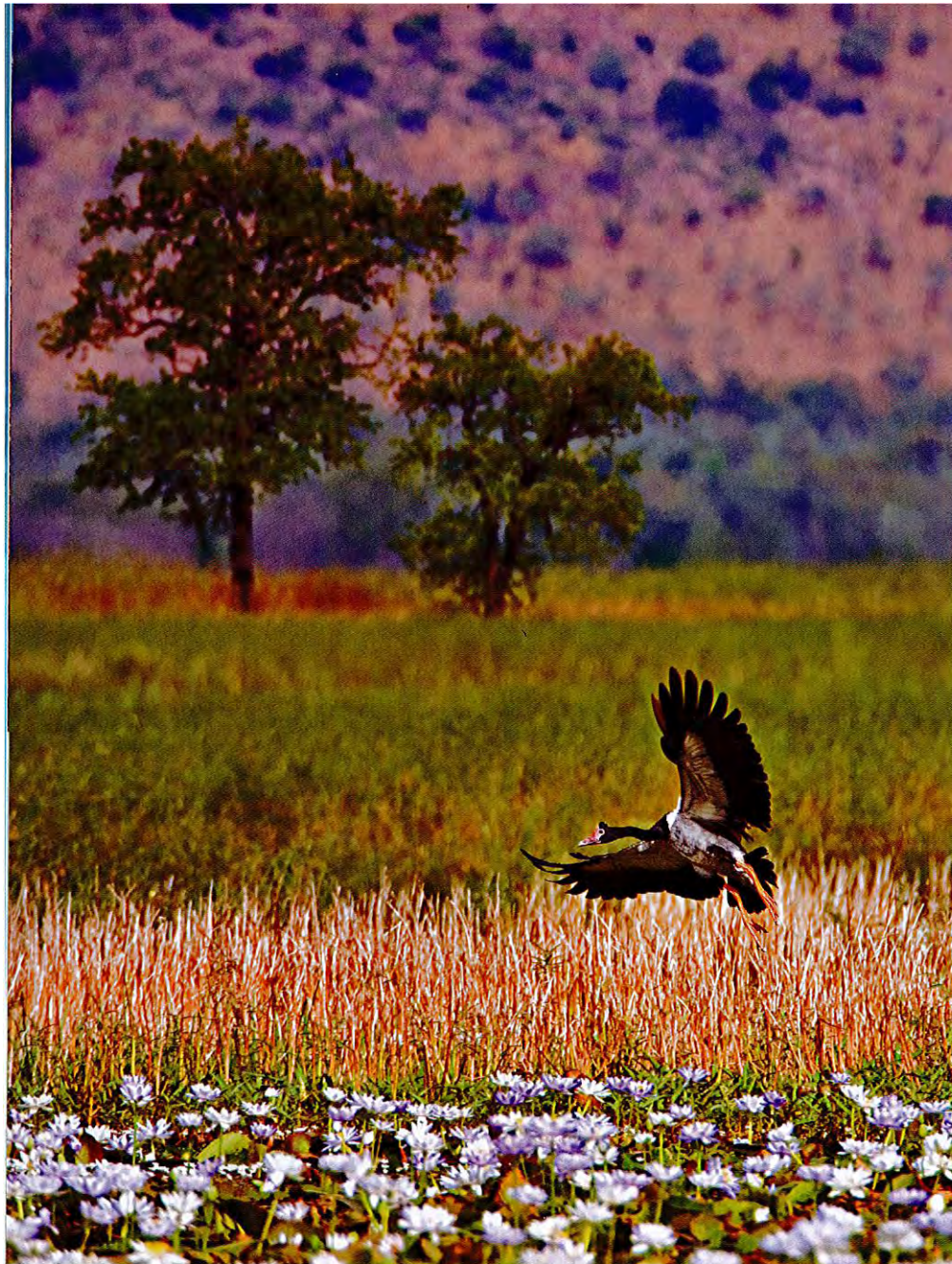
**Top left** Carrying out prescribed burning operations by helicopter.  
Photo – Ed Hatherley/DEC

**Top** New marine reserves at Eighty Mile Beach and Roebuck Bay will give greater protection to migratory waders.

**Above** Raft Point near Doubtful Bay.  
Photos – David Bettini

descent in 2006, compared to about 3.5 per cent in WA as a whole.

The involvement and employment of Aboriginal people in conservation and land management is central to



**Left** A magpie goose in Parry Lagoons Nature Reserve.  
 Photo – David Bettini

**Below left** Cave painting.  
 Photo – Jiri Lochman

Training was recently provided by DEC for Aboriginal rangers in fire management and introduced animal control. More than 40 rangers attended a feral pig management workshop in Fitzroy Crossing in August, where they received training to increase their capacity to undertake pig control. Having Aboriginal people employed on their own country, assisting in delivering the coordinated management of fire, introduced animals and weeds as part of the landscape-scale conservation initiative, will deliver significant social and environmental outcomes. Rangers will also work with tour operators and visitors to promote positive visitor experiences while protecting Indigenous values.

The strategy will assist Aboriginal communities to identify and develop culture- and nature-based tourism opportunities at key sites, including those along the Kimberley coast visited by cruise ships. Tourism WA and other stakeholders will work together to build the capacity of Aboriginal tourism businesses, and work with Aboriginal coastal communities to establish tourism products to service the cruise tourism market.

### **Better science for decision-making**

While scientists have made substantial inroads in documenting the landscape and biological values of the Kimberley in recent decades, the region remains one of the last great frontiers for science. The central and south-eastern Kimberley, vast tracts of Aboriginal land along the north-west coast and most of the coastal waters remain largely unexplored. Data from the WA Herbarium reveal one in eight plants collected in the wet season are new species for the Kimberley.



the strategy. The state government has passed the Conservation Legislation Amendment Act 2011 through Parliament to allow for joint management of land between DEC and other parties, including traditional owners, and to expand the range of Aboriginal customary activities that can be undertaken in conservation reserves. Successful joint management programs are already in place in Broome and Kununurra, with the Yawuru and the Mirriuwung-Gajerrong traditional owners respectively employing more than a dozen Aboriginal staff.

The Kimberley Science and Conservation Strategy will also support ranger programs already in place including those managed by the Kimberley Land Council, and provide mentoring, training and career pathways for Aboriginal people.



**Above** Mitchell Falls in Mitchell River National Park.

*Photo - David Bettini*

**Right** Tourists at Steep Island.

*Photo - Alex Steffe/Lochman Transparencies*



An important goal of the Kimberley Science and Conservation Strategy is to increase knowledge to support informed decision-making, planning and management. The state government has provided significant new funding of \$14.2 million for a major marine science program in the Kimberley, to be coordinated by the Western Australian Marine Science Institution.

The Department of Commerce, in partnership with DEC, the WA Museum and other key government agencies, has already started the development of a Kimberley knowledge portal which will improve access to existing environmental knowledge on the region, including science and research.

The Kimberley Science and Conservation Strategy also provides new funding of \$300,000 over three years to The University of Western Australia's Centre for Rock Art Studies to support immensely important rock art research in the Kimberley. The Kimberley has most of the oldest archaeological sites known in the country and the greatest diversity of rock art in the country, a cultural treasure of international significance and scale.

In partnership with scientists from four universities, Indigenous organisations and the Australian Research Council, DEC is taking part in a large-scale archaeological research program in the north-west Kimberley encompassing the Mitchell River and Lawley River national parks. Scientists are working alongside traditional owners to investigate the timing of the earliest human occupation in the region. An extensive excavation program is underway and comprehensive rock art mapping, recording, dating and sampling is in progress. Results of the project will assist DEC, Indigenous bodies and tourism operators to make informed management and conservation decisions concerning the rich and unique cultural heritage of the region.

Carolyn Thomson-Dans is a special projects officer with the Department of Environment and Conservation (DEC) and has contributed to many DEC publications and *LANDSCOPE* articles. She can be contacted by email ([carolyn.thomson-dans@dec.wa.gov.au](mailto:carolyn.thomson-dans@dec.wa.gov.au)).

Jacinta Overman is a senior planning officer with DEC. She can be contacted on (08) 9442 0309 or by email ([jacinta.overman@dec.wa.gov.au](mailto:jacinta.overman@dec.wa.gov.au)).

Daryl Moncrieff is DEC's Kimberley regional manager and can be contacted on (08) 9168 4200 or by email ([daryl.moncrieff@dec.wa.gov.au](mailto:daryl.moncrieff@dec.wa.gov.au)).

*This article provides only a brief overview of the Kimberley Science and Conservation Strategy. The full strategy can be downloaded at [www.dec.wa.gov.au/kimberleystrategy](http://www.dec.wa.gov.au/kimberleystrategy). In the near future, *LANDSCOPE* will feature an article on the landscape-scale conservation initiative.*



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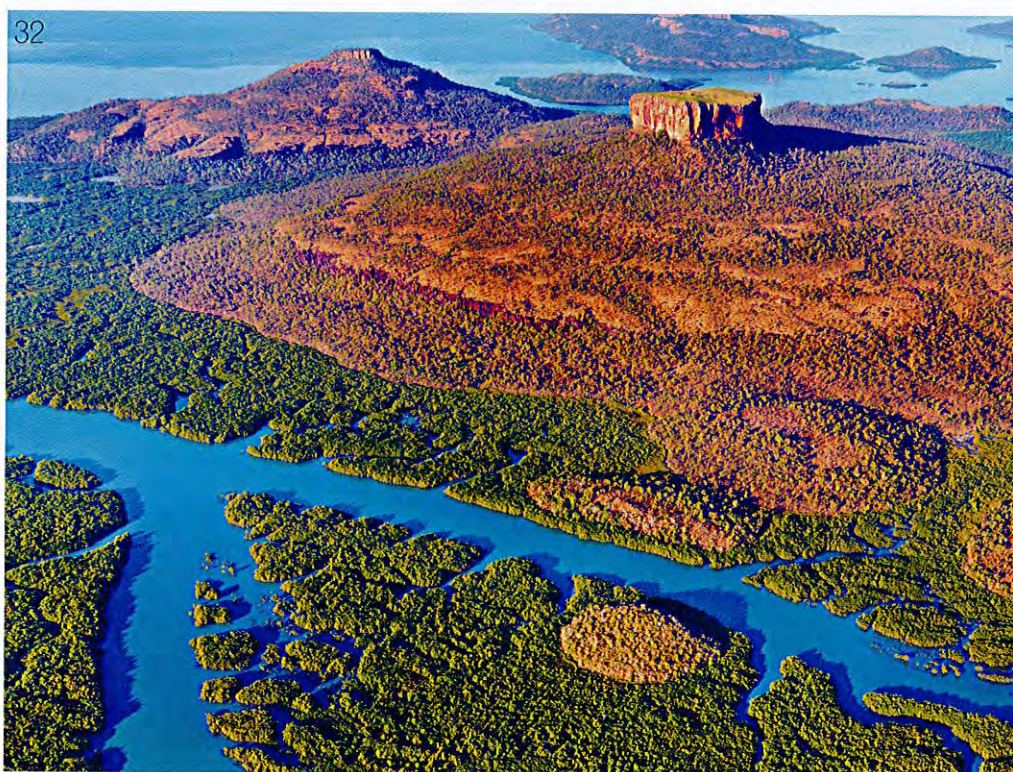
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