

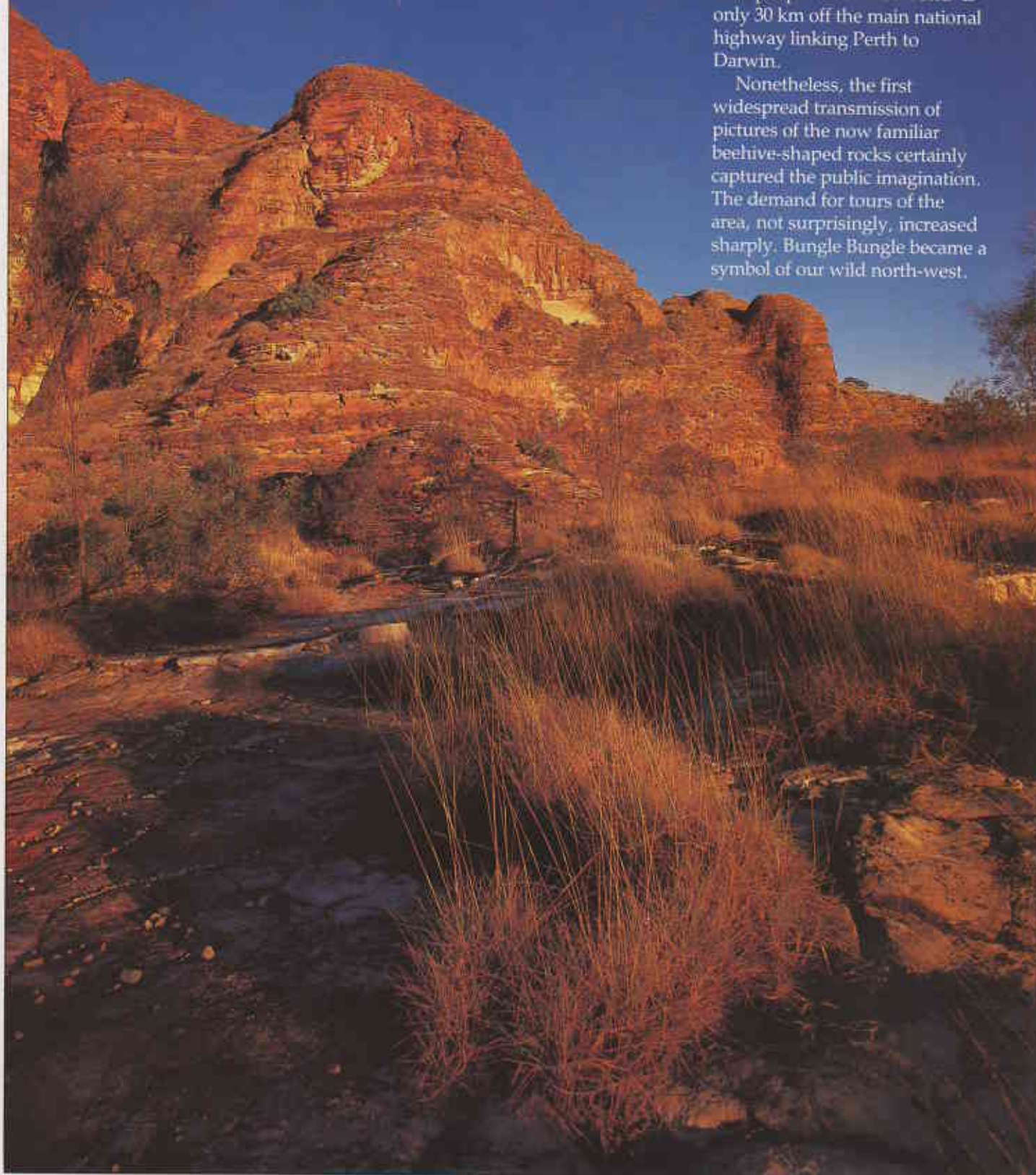
Bungle Bungle

The Birth of a National Park

by Liana Christensen and Chris Haynes

In 1983 the media announced the discovery of the 'lost world' of Bungle Bungle. If it had been lost it was certainly news to the local people. This 'lost world' is only 30 km off the main national highway linking Perth to Darwin.

Nonetheless, the first widespread transmission of pictures of the now familiar beehive-shaped rocks certainly captured the public imagination. The demand for tours of the area, not surprisingly, increased sharply. Bungle Bungle became a symbol of our wild north-west.





M. Pelusey

Eucalyptus aspera highlighted against the stormy sky. Dramatic contrasts mark the wet season: after the storm there is a flash flood and pellucid light.

Bungle Bungle truly is a wilderness. Every kilometre between the main highway and the rock massif is filled with ridge after ridge of jagged, bone-jarring rock formations, sometimes interspersed with soaks and creeks which are impassable until well into the dry season. The area is bounded by the Ord River on the east and south and by pastoral leases to the west and north.

It is just this rugged quality that appeals to the adventurous visitor. Although rugged, however, much of the environment is fragile. Years of

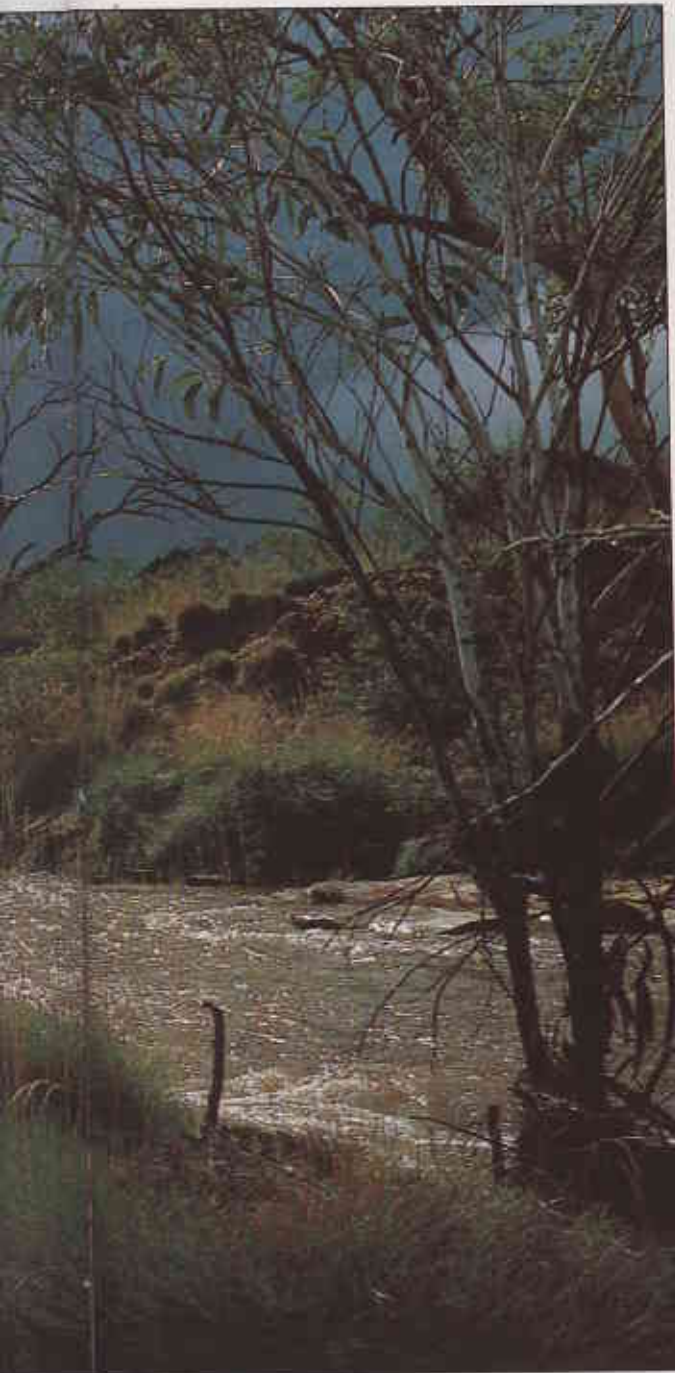


heavy cattle grazing left severe erosion problems. Europeans worried about the siltation of Lake Argyle; Aborigines mourned the passing of waterholes once teeming with life. Many species of plants and animals that once provided a renewable source of 'bush tucker' are now extinct in the region or numbers are very depleted. The area was given some protection by being included in the Ord River Regeneration Area, declared in April 1967. There are no provisions at Bungle Bungle for a large influx



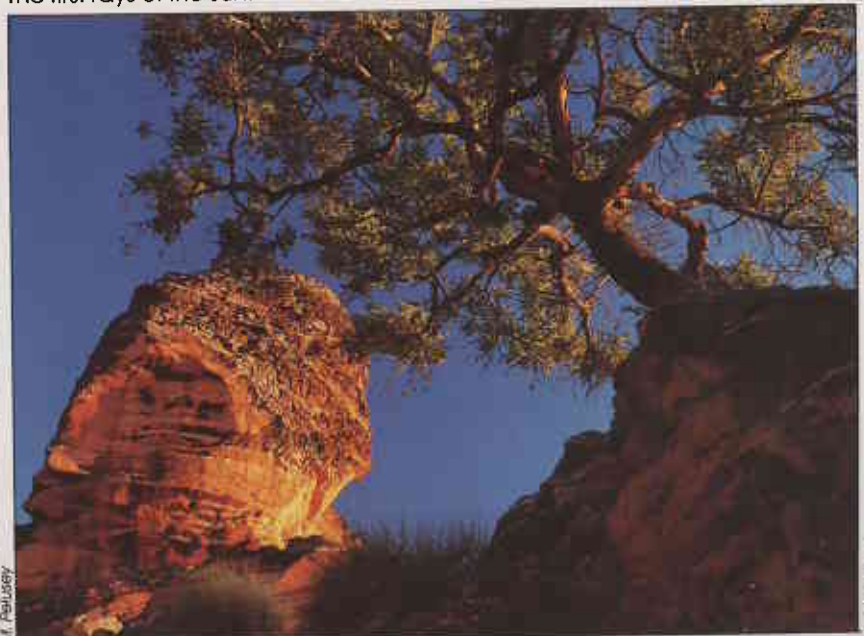
J. Lochman

This close-up clearly reveals the 'tiger-stripes' formed by alternate bands of algae and silica over the fragile crumbling sandstone.



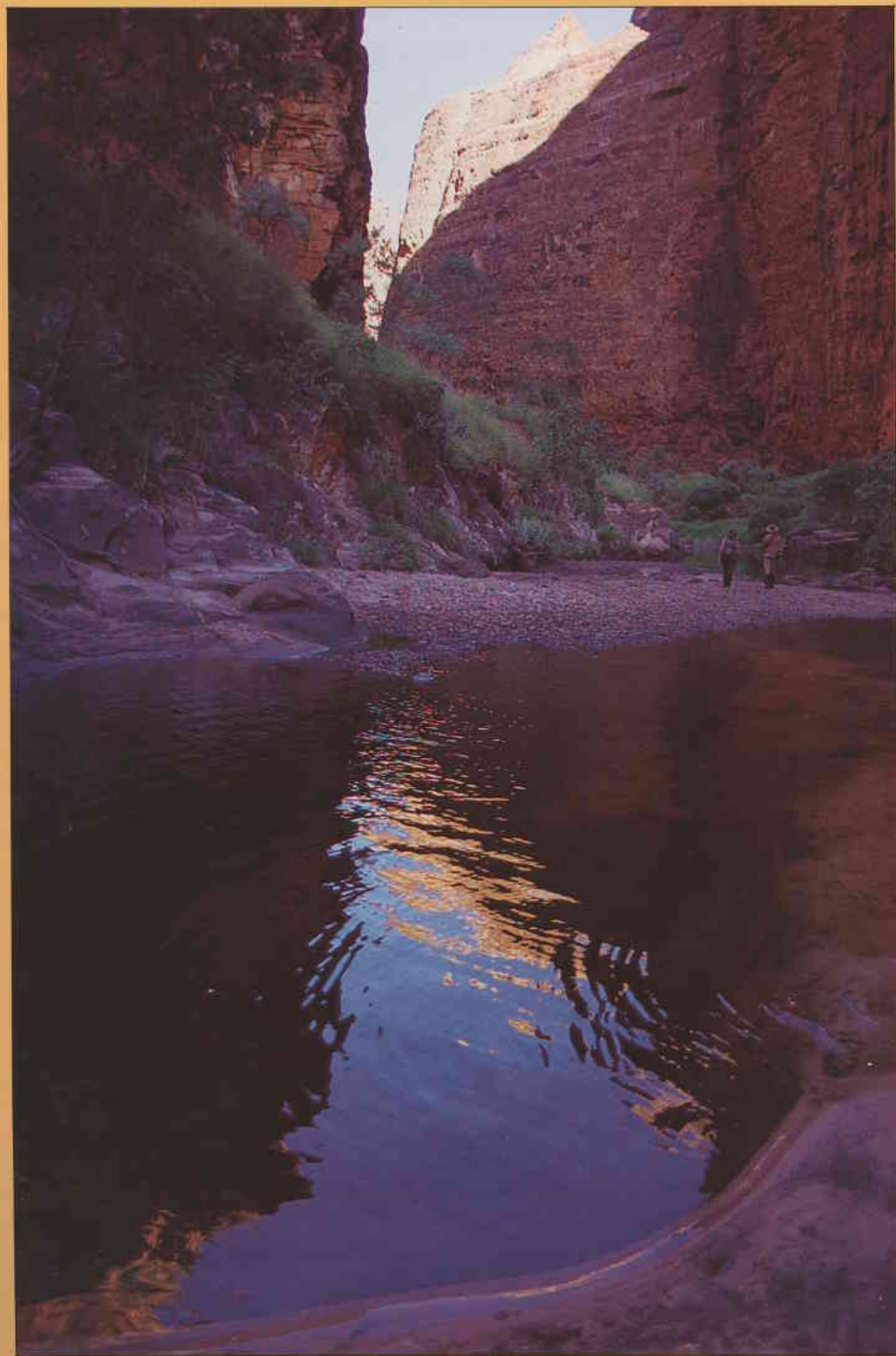
C. Winfield

A glorious mosaic of siltstone forms the creek bed. The first rays of the sun.



M. Peasey

C. Winfield



of visitors. Only rough tracks exist, and too many four-wheel drive vehicles forging their own way into the massif would spell disaster for the already severely eroded land.

Anticipating the demands of prospective visitors, the Environmental Protection Authority, in 1983, established a study group to report on the issues involved in developing this area as a national park.

The study group considered the protection of the land surface, conservation of biological values and a wide range of social issues, including the interests of the Aboriginal people with traditional affiliations and the increasing number of visitors. The group produced a draft report (on which public comment was sought) and then a final report to the EPA in 1985.

Back-packers enjoy Piccaninny Creek, an excellent place for quiet reflections. (left)

Too many four-wheel drive vehicles making their own paths would spell disaster for this environment.

In April 1986, the Government decided to proceed with the recommendations of the study group that much of the area should become a national park of about 3 000 sq. km. It was not an easy decision.

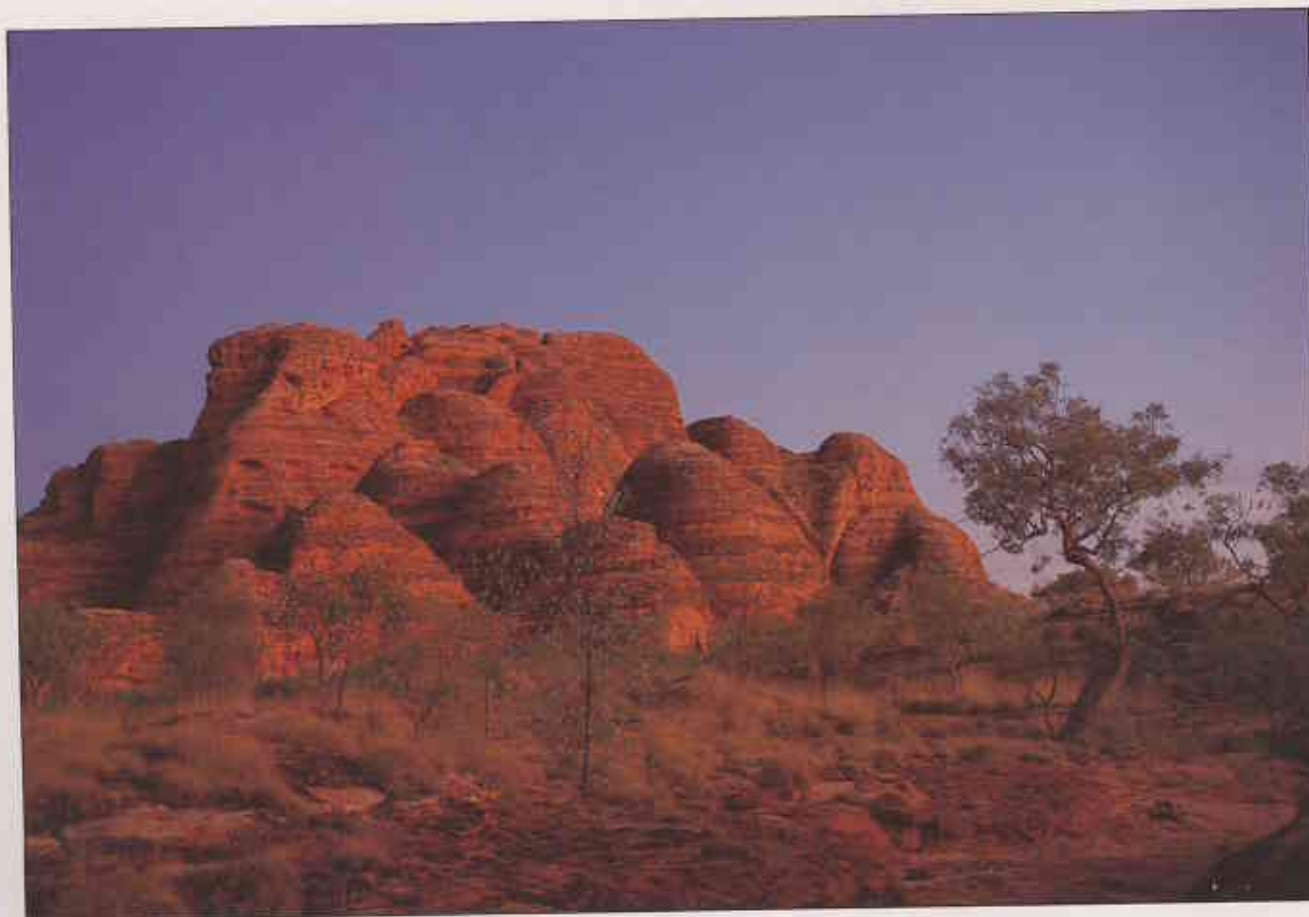
Apart from the complex balance of social issues which had to be considered, the area is going to be extremely expensive for the Department of Conservation and Land Management to administer as a national park.

To provide adequate services and safeguards, it is proposed

that two rangers be on site as soon as possible. The cost of providing full housing and associated services could be three times the amount needed to establish similar services in the south-west. Then there is the cost of upgrading tracks, the provision of an airstrip (both for emergency services and general tourism use) and visitor information services. The annual cost of maintaining the services will probably approach \$100 000 a year. No wonder the Government had to look extremely hard at the proposed development.



J. Lockman



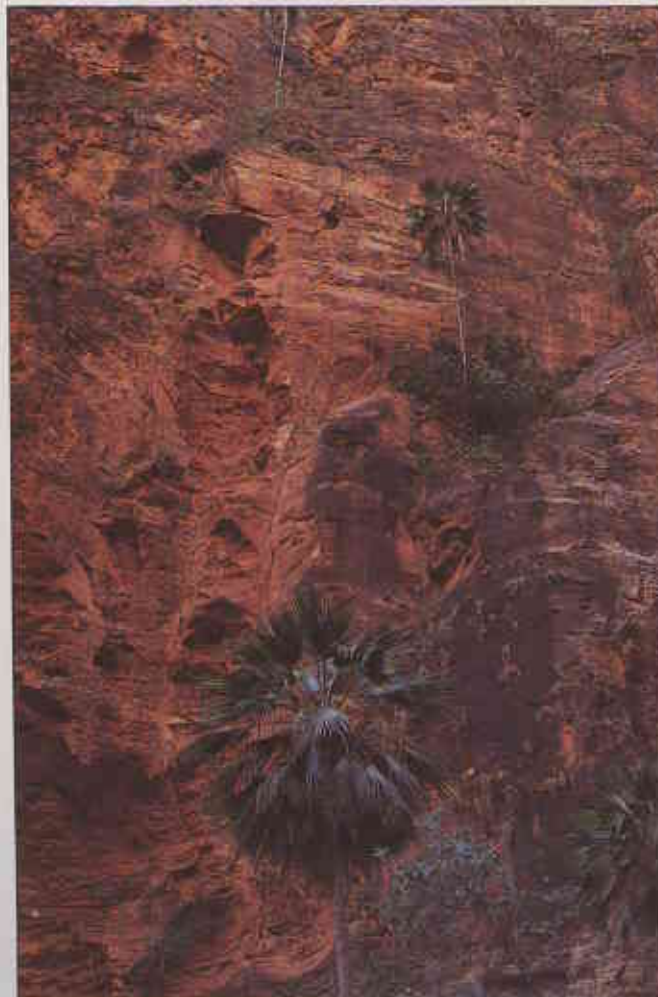
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J. Lochman



J. Lochman



J. Lochman

Bungle Bungle, however, is a significant environment, and worth the status of national park. Many parts of the area need protection and preservation: the soil, the vegetation, historic remains from pastoral use, and many traces of Aboriginal activities going back for thousands of years. The massif itself is vulnerable; parts of it are so soft that they can be crumbled in the hand. Rangers will be essential to both protect and promote understanding of this environment.

The fate of the national park will be shaped by the development of a management plan. Further decisions need to be made. How much of the area should be designated as an A-class reserve, and where should the boundaries be? What should be the appropriate uses for the remaining C-class reserve? What kinds of recreational developments are compatible with conservation? How can we best employ the Aboriginals' vast and detailed knowledge of the area to mutual benefit?

A detailed management plan is being prepared, and soon CALM will be seeking public comment on the way the park should be developed.

Meet some of the inhabitants:

Common Tree Snake (*Dendrelaphis punctulatus*). (top left)

Green Tree Frog (*Litoria caerulea*). (centre left)

So new to science they are still an unnamed species, these livistonia palms are a feature of the region. (left)

An unwelcome intruder, the wild bull causes serious erosion. (below)



J. Lochman

What is Bungle Bungle?

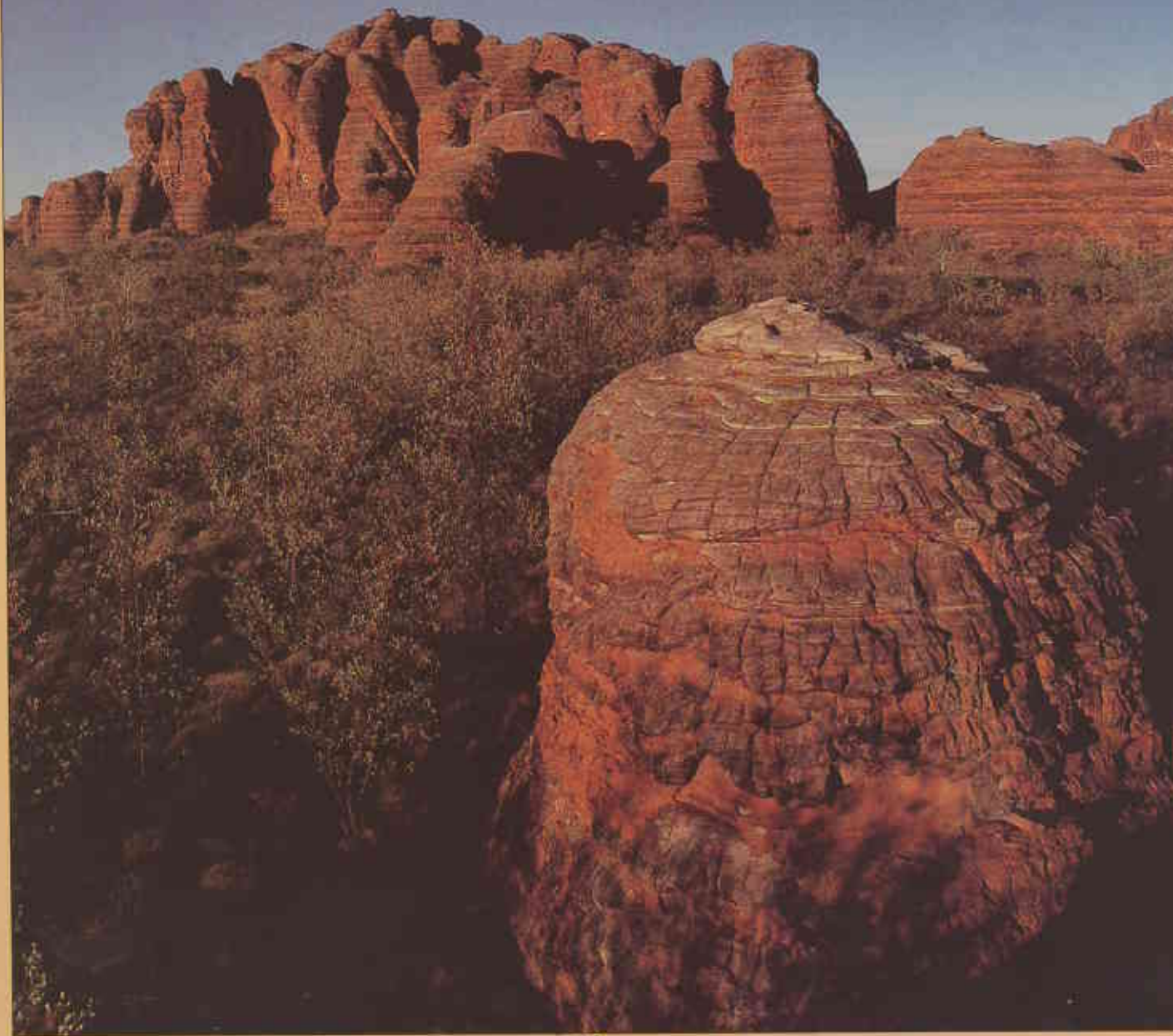
The dome-like towers which have come to symbolise Bungle Bungle are only one of the many features in a geologically remarkable region. Such bizarre landforms are usually found on limestone, but here and at the 'Ruined City' of Arnhem land, the structures are sculpted from siliceous sandstone, called *Purnululu* in the local *Kidja* Aboriginal language.

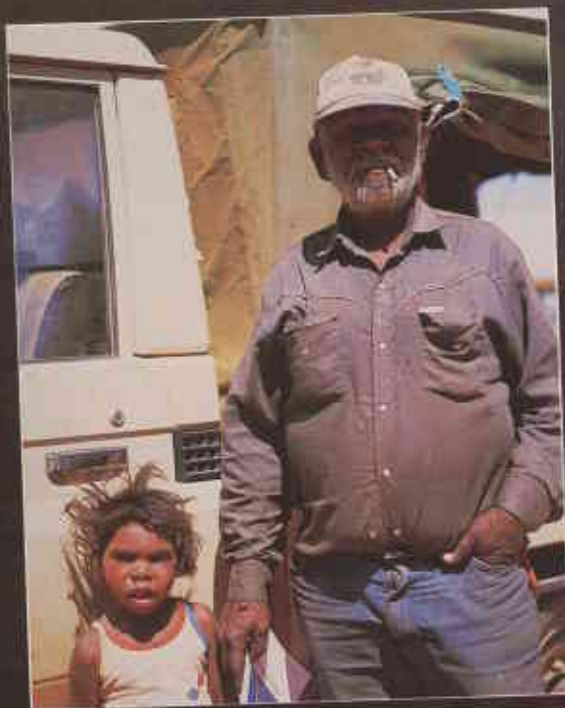
The whole massif is a plateau of a formation called Eider Sandstone by geologists, protruding some 200 m above the surrounding lowlands.

One reason the environment is so fragile is that the sandstone here is very weak and easily crushed. In fact the whole structure would have gone back into the geological melting pot were it not for a strange

phenomenon. The familiar horizontal stripes formed by alternate bands of orange and black are actually skins of silica and algae binding the landform together. What at first appears to be a 'layer-cake' of different rock types is actually all sandstone covered with a thin, tiger-striped skin. Once the skin is disturbed the sandstone underneath rapidly disintegrates.

If the base geology of an area is disturbed, then its life systems will suffer greatly. This has already happened to some extent at Bungle Bungle, but it would be tragic to let the destruction spread unchecked. So far, we know that Bungle Bungle possesses at least two species new to biology, as well as quite a few rare or restricted species. Recent studies have also revealed species previously unknown in W.A.






Raymond Wallaby.

C. Warrilow

Not so long ago — in living memory — a woman called Kemintul was born in this magnificent land. She and her fellow Aboriginal people had a lifestyle based on an intimate knowledge of that land and its resources. Her ancestors moved with the seasons from the lowlands to the headwaters of various creeks and rivers. When the need arose they sheltered in the caves and overhangs of the rock massif which dominated the landscape. Their presence is recorded on the carved rock face. They knew the country as *Purnululu*; it has more recently been called Bungle Bungle.

Kemintul was born into times of rapid change. In the late 1800s the



Kimberleys were being opened up for settlement on pastoral leases. By 1900 the best land along the Ord River was chosen for pastoral lease.

Predictably, there was conflict.

At this time *Purnululu* — always a home and shelter — became a refuge. At one place the Aboriginals used notched tree trunks to scale the cliffs and pulled them up afterwards, leaving the silent, impenetrable cliff face to confound pursuers.

Kemintul had two children: Jalpart and Juwiwiriny. Jalpart, in turn, had a son whom we know as Raymond Wallaby. When Kemintul died she was buried with proper ceremony in a cave on her homeland, at Osmond Valley Station.

Kemintul's grandson, because of his strong traditional ties to the area, is one of the senior members of the community now at Turkey Creek. He and other local Aboriginals are keen to share their knowledge of *Purnululu*. Witnessing first-hand the distillation of thousands of years of traditions, the songs, the stories of Aboriginal culture will enrich the experience of people visiting the new national park.

The care, and passing on of the Aboriginal people's knowledge, in a way which is acceptable to the people themselves, provides an additional challenge in both the preparation of a management plan and the ongoing management of an exciting part of Australia.

Landscape

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COVER PHOTO

A tender moment between human and whale shows the care which was a feature of the highly successful Augusta whale rescue.

Photo courtesy of the Western Mail.

A Conflict of Interests

Why are there so many conflicts when it comes to our natural environment? There is conflict among industrial groups exploiting natural resources; environmentalists advocating preservation of wildlife; government agencies; and recreation groups.

In an ideal world we would have a total understanding about ecosystems and natural resources, and of the long term needs of the community. But this is not an ideal world, and much of the conflict stems from a lack of agreement about environmental impact and human needs.

Take whale strandings for instance. From the time whales beach, tissue damage occurs due to a rise in body temperature and the sheer weight of the mammal. We don't know how long they have to lie there and how hot they have to get before the chances of survival are next to nil. Strandings may be part of a natural culling process or accidents caused by human impact on the environment.

And, what about the people who turn out in large numbers under often adverse conditions, and become so emotionally caught up in saving these creatures? What weight do we put on their need?

It is not an ideal world. We are a long way from knowing the answers to too many important questions.

There is a need for more investigation, better communication and a broader understanding of environmental processes and human needs.

This brings us to *Landscape* and its purpose. Its prime objective is to achieve an understanding about conservation of ecosystems and management of natural resources.

Landscape's aim is to provide expert information on the major conservation issues, latest developments, research in progress and general features of the State's wildlife, national and marine parks, nature reserves and forests.

It will give a balanced representation of viewpoints and will not shy from contentious issues.

Landscape will inform readers about the natural wonders of our environment, the management considerations involved and the lifestyle of its inhabitants. It will not provide all the answers, but it will present the facts and therefore a basis for sound argument.

Landscape is Western Australia's own conservation and wildlife magazine.

Wetlands

The theme for this year's World Environment Day has been 'Wetlands — Not just for the Birds'. In this issue of *Landscape* we feature the ecological importance of wetlands.