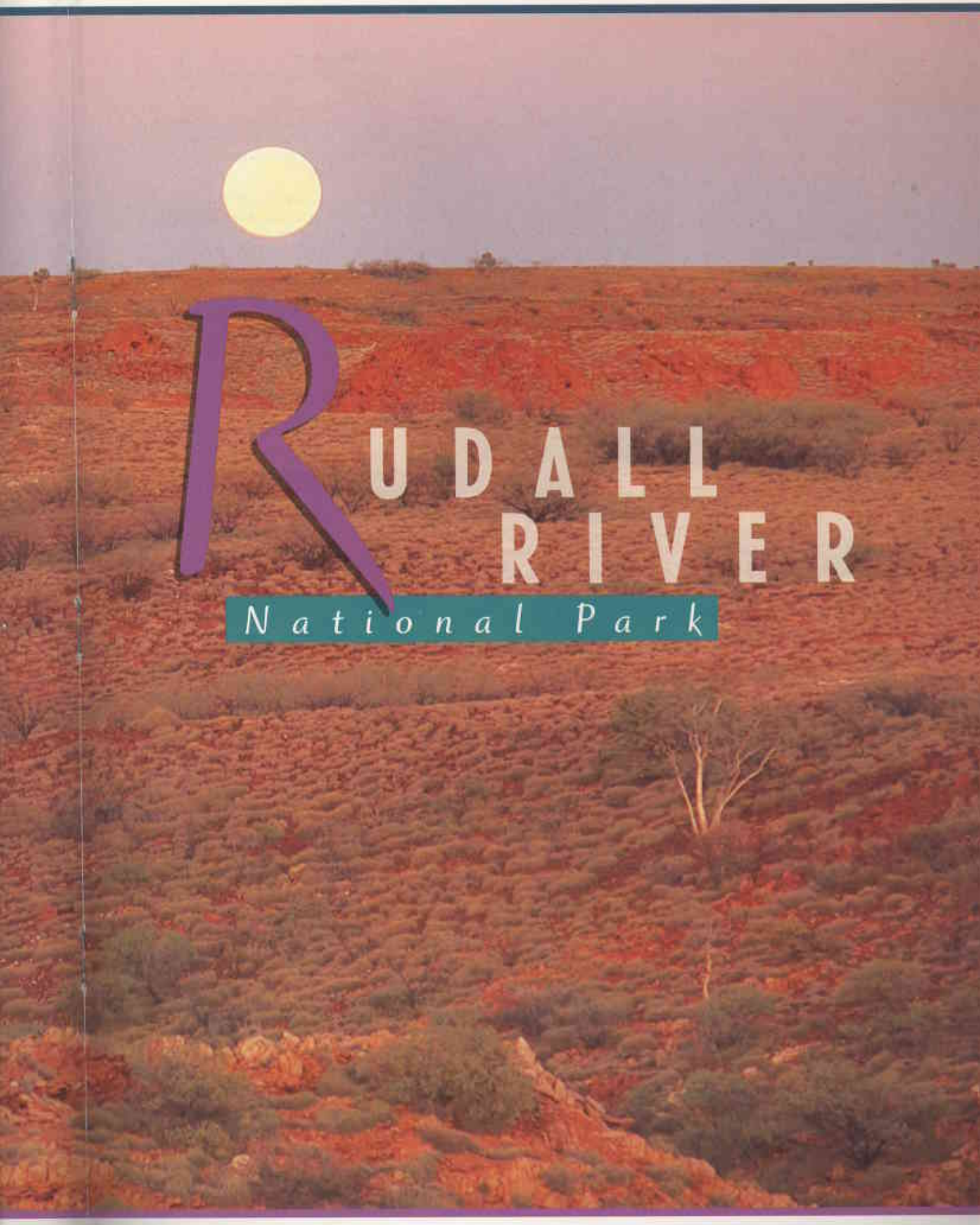
"It's beautiful. It's really beautiful." That's how I felt when I finally arrived at the Rudall River National Park, five days after leaving Perth. It had been a long and sometimes arduous journey, but it was worth it. This is one of the most remote places in the world. It has a fascinating history and, despite its harsh climate, is home to two groups of desert Aborigines and an exploratory uranium mine.

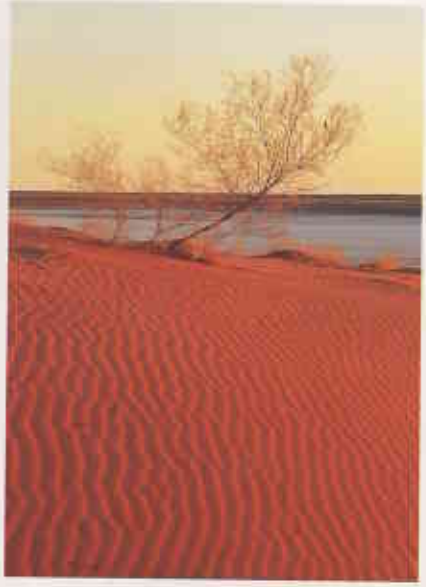
BY DAVID GOUGH


RUDALL RIVER
National Park

At 1 283 706 hectares, the Rudall River National Park is the largest national park in Western Australia and one of the largest in the world. In fact, it is more than two-and-a-half times a large as the Grand Canyon National Park in Arizona. But as well as being so vast, it is also one of the most remote places in the world.

The park sits on the boundary between the Great Sandy and Little Sandy Deserts and includes the watershed of the Rudall River. Salt lakes, which are part of a palaeodrainage system, are characteristic of these desert regions. Lakes Dora, Blanche, Winifred, George and Auld form a U-shaped group east of Rudall River, with only Lakes Dora and Blanche lying inside the park boundary. Lake Dora is 198 metres above sea level and it is only for a short time after particularly heavy rains that there is any appreciable quantity of surface water in this or any of the other lakes.

Sand dunes cover much of the desert areas in the eastern and south-western parts of the park. They form parallel ridges of between 20-40 metres high, trending mainly south-east to north-west, lying between 200 metres and six kilometres apart and often having a length of more than 40 kilometres. The central rocky area, between the two deserts, is flatter and it is here where the main tracks cross the park: from Telfer in the north to the Talawana Track in the south, and westwards from the Rudall River crossing to Hanging Rock, on the western boundary of the park.



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Main: The moon rises over Fingoon Range.
Photo – Marie Lochman
Inset: The Rudall River, dry for most of the year, flows into Lake Broadhurst only after heavy seasonal rains.
Photo – CALM

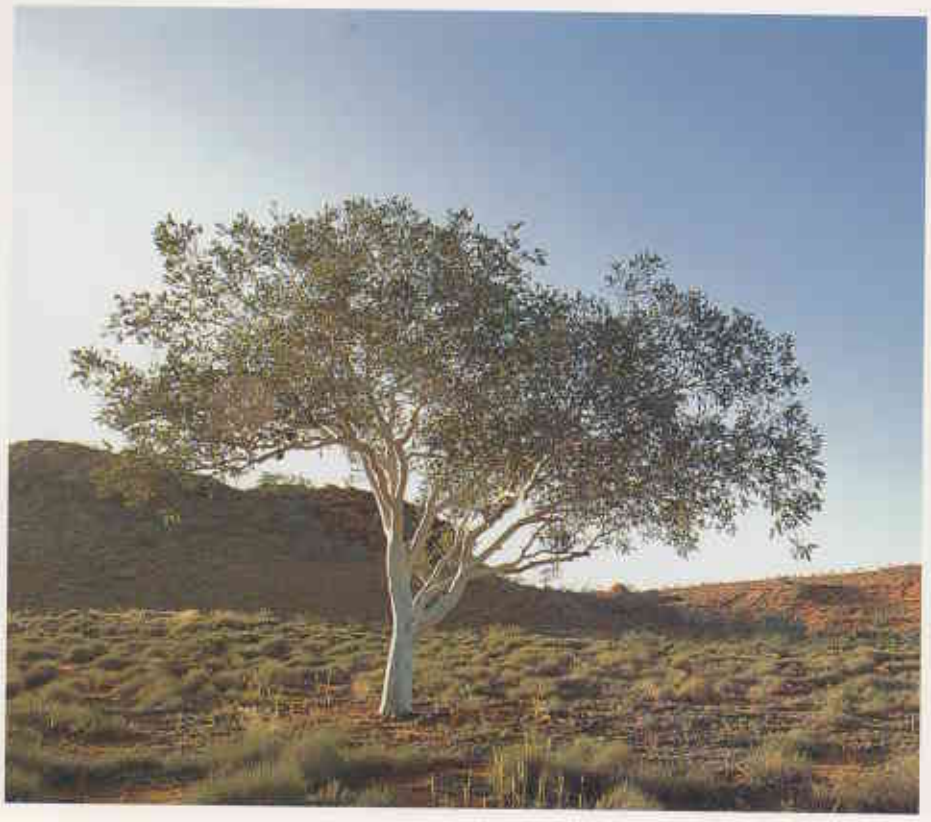
Left: Lake Auld, named by explorer Larry Wells, is one of a chain of lakes to the east of the park.
Photo – Jiri Lochman

Below: Rough-leaved bloodwood (*Eucalyptus setosa*) is another common eucalypt found in the park.
Photo – Marie Lochman

VEGETATION

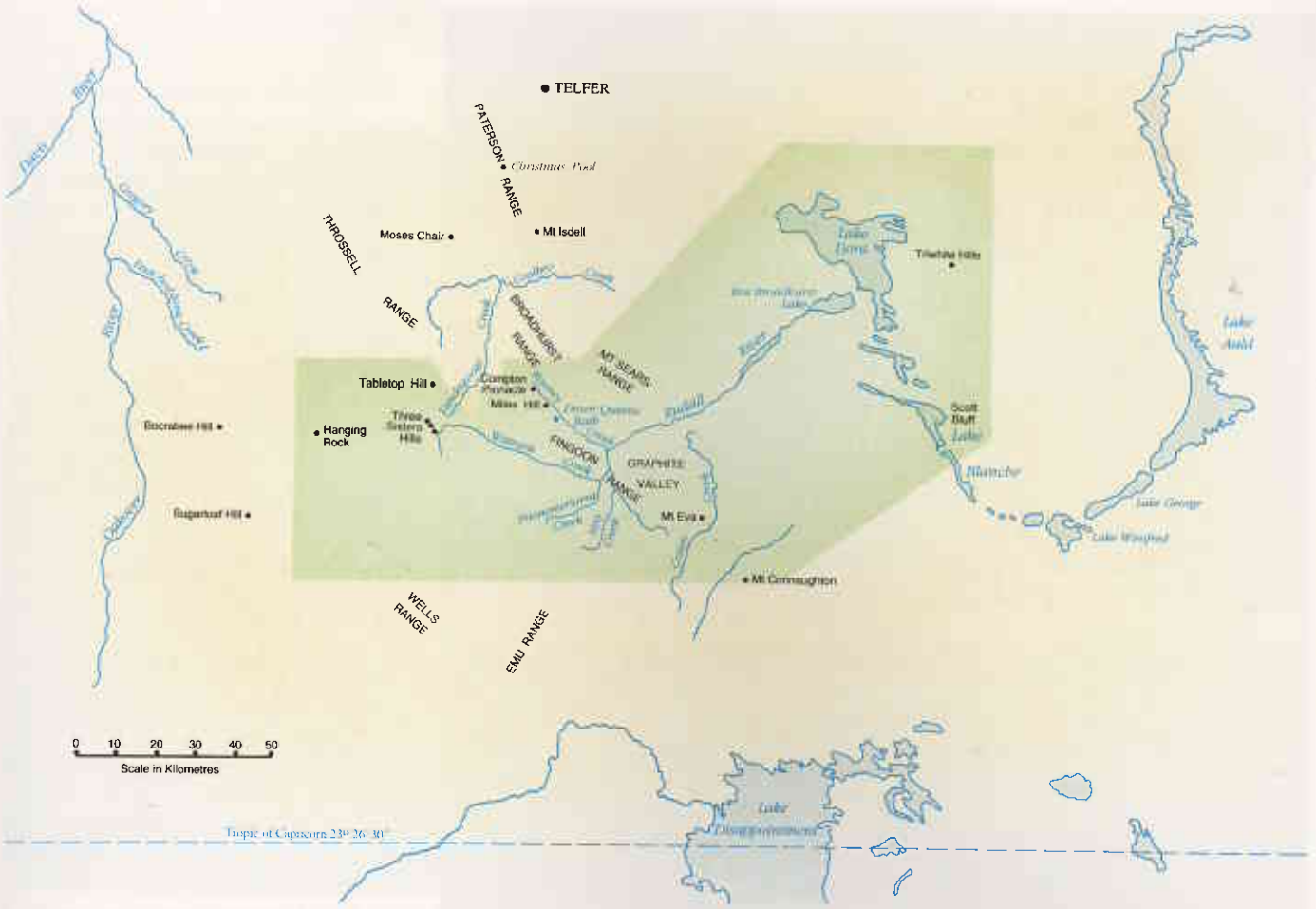
Rudall River National Park can be roughly divided into three landscapes—the Little Sandy Desert in the south-west, a central belt of stony hills and flattish plains, and the Great Sandy Desert to the north-east.

A mosaic or variable mixture of tree and shrub steppe cover sand dunes and rocky hills. The main variations are around the watercourses, where there are eucalyptus tree savannas, depressions with teatree scrub, and small patches of mulga (*Acacia aneura*). Common species include desert bloodwood (*Eucalyptus chippendalei*) near the dune crests, with feathertop spinifex (*Plechtrachne schinzii*) mostly along the flanks; kanji (*Acacia pyrifolia*) on the stony plateaus and sandplains; waterwood (*A. coriacea*), cork tree (*Hakea suberea*) and occasionally jaradinty (*H. macrocarpa*) and *Melaleuca lasiandra* on the low-lying sandplains.



Between the sandhills is a mixed shrub of acacias and spinifex, occasionally with tree species, that varies with soil type. Kanji and waterwood grow on the coarse sands, but on the lighter sands *Acacia pachycarpa* are found, often with Wickham's grevillea (*G. wickhami*). Thick-leaved mallee (*E. pachyphylla*) and twin-leaf mallee (*E. gamophylla*) occur on laterised soils, while desert oaks (*Allocasuarina decaisneana*) can be found growing in isolated scattered clumps or dense groves in depressions, often with teatrees.

Eucalyptus tree savanna is restricted to the river flats of the Rudall River itself and is characterised by river redgum (*E. victorix*) near the waterline, with coolabah (*E. microtheca*) on flats away from the river, creeks and billabongs. A small, 20-kilometre area of teatree scrub grows near the mouth of the Rudall River, where an outwash plain has formed. *Melaleuca lasiandra* and *M. glomerata* shrubs are dominant, but other shrubs, including native willow (*A. salicina*) and quandong (*Santalum acuminatum*) may also occur.



Some lower order plants such as lichens, algae and fungi have been collected in or near the park. A species of *Lichenothelia*, collected from a quartz pebble near Number 11 Pool in July 1982, was only the second record of this unnamed species from Western Australia, the other being in the Pilbara. Two species of the slime algae *Spirogyra* sp. and the brittle algae (*Nitella* affin. *lhotzkyi*) were also collected from Number 11 Pool. Other brittle algae (*Chara* spp.) were collected at Curran Curran Rockhole and in pools along the Rudall River. Despite extensive searches, only two fungi species have been collected in the park.

ANIMALS

Of the animals occurring in the park, birds are better known than any other group, as they have been located in a number of surveys. More than 90 species have been located, with most being found near the Rudall River and other stream lines. The list includes more than a dozen waterbirds, which have been seen on pools, especially on the Rudall. Some, including the pacific black duck and Australasian grebe, have been recorded breeding. Species often seen coming to drink at pools include the spectacular painted finch, the spinifex pigeon, which flies up with a clatter of wings, and the fairly plain-coloured white-plumed and grey-headed honeyeaters. Some species, including the crimson chat and little button quail, arrive in good seasons and may stay to breed, often from far water. Others, like the spinifexbird and white-winged fairly-wren, also occur far from water, but appear to be resident through good seasons and poor.

Though there is little evidence to suggest changes in bird populations, the wedge-tailed eagle has apparently become less common, probably the result of the decline in medium size mammals, such as various species of bandicoot and wallaby, from the western desert regions (see 'The Disappearing Mammals', *LANDSCOPE*, Spring 1990). There is evidence to suggest that this decline corresponds with the cessation of the regular burning of vegetation through 'fire stick farming' methods adopted by the Aborigines and the arrival of foxes in the area. The Aborigines believe that it is also coupled with the cessation of increasing ceremonies, designed to maintain species numbers.

Although 37 native mammal species have been recorded in the Great Sandy Desert, surveys in the 1980s identified only 12 species in the park, and the WA Museum's list totals only 17. These include the dingo (*Canis lupus dingo*), the lesser hairy-footed dunnart (*Sminthopsis youngsoni*), tarrkawarra or spinifex hopping mouse (*Notomys alexis*), ngadji or pebble-mound mouse (*Pseudomys chapmani*), mingkiri or sandy inland mouse (*Pseudomys hermannsburgensis*) and Gould's wattled bat (*Chalinolobus gouldii*). Further research is required to establish the present status of mammals in the park.

The WA Museum has records of seven frog species (four tree frogs and three ground frogs), 13 species of geckos, seven of dragon lizards, 21 of skinks, two of goannas, four of legless lizards and five of snakes in the park.

SOCIAL HISTORY

The Rudall River was named by Frank Hann after the surveyor and explorer William Frederick Rudall (pronounced Roo-dal, with stress on the second syllable). To the Aboriginal people who live in this remote desert region, it is called *Karlamilyi*.

These desert-dwelling Aborigines

belong to the Warnman, Gardutjarra, Mandjildjarra and Ngulibardu language groups. The Warnman ranged from the headwaters of Karlamilyi (Rudall River), south to about the 23rd parallel, east to the Canning Stock Route and north to Lakes Dora, Blanche, George and Auld.

The Rudall River is unique in the region—being a major watercourse with reliable water sources and permanent pools. This, together with the abundant wildlife it attracts, makes it an oasis for desert dwellers and one that featured significantly in stories of mythical heroes from the Dreaming as well as in their day-to-day lives. The western deserts are criss-crossed by a large number of song lines or Dreaming tracks associated with creative beings. Among these are two within the area now covered by the park. One involves the travels of Wadi Gudjara (two men) along the river, whereas the other involves two snakes and the areas of Lakes Dora and Blanche, at the 'mouth' of the river. Lake Dora is the believed to be the place where the snakes disappeared beneath the ground.

Lake Disappointment, just south of the park, was strictly avoided by all the groups whose territories bounded on it. Being a salt lake, it offered little in the way of resources for the Aboriginal people, but it was more than this that kept them away. They had a great fear of the Ngayurnangalku mythological beings, who lived in a subterranean world beneath the lake, and not even the bravest of the desert dwellers would dare set foot there. Today, the lake, its surroundings and even the airspace above it, are still considered to be taboo areas to all humans, as the Ngayurnangalku are believed to have the power to pull aircraft down from the sky to crash on the lake's surface.

Top left: A budgerigar stops to drink from a pool. Occasionally, huge flocks of these birds can be seen in desert regions.
Photo – Marie Lochman

Centre left: The tarrkawarra or spinifex hopping mouse is one of the 17 mammals recorded in the park.
Photo – Babs & Bert Wells/CALM

Left: Lake Disappointment, just south of the park, was a natural boundary between neighbouring Aboriginal groups.
Photo – Jiri Lochman

An aerial view of Hanging Rock, which is now located within the park's western boundary.
Photo – Jiri Lochman

THE EUROPEANS ARRIVE

The western desert people were one of the last in Australia to be affected by European encroachment. It was not until the late 1800s that explorers began crossing this region. From 1872–74, Colonel Peter Egerton Warburton crossed the western deserts, north of Rudall River, on his journey from Alice Springs to Roebourne. It was during this journey that he incorrectly fixed the position of Joanna Spring, a mistake that partly contributed to the deaths of two men from the Calvert Expedition of 1896 (see 'Land of the Lost', *LANDSCOPE*, Summer 1996–97), which passed east of the area now covered by the park. The first European explorations of the Rudall River area itself came in 1896–97, when surveyor William Frederick Rudall led a party of men in search of George Jones and Charles Wells, the missing men from the Calvert Expedition. Rudall made three trips through the present park area, during which he named several of its features—including Mt Connaughton, after one of the members of the search party, and Hanging Rock—or recorded their Aboriginal names. At that time, Rudall noted that there was good gold-bearing land, but that the remoteness and sheer inhospitality of the area made it uneconomical to investigate further. He crossed the river several times and in his account of the search, written a few years later, he commented that:

> "The Rudall River is a series of deep gulches 8–10 ft between banks and altogether is about 200 yards wide. There must be large quantities of water run down it in a rainy season."

Someone else who was in the area at about the same time was Frank H Hann. Hann was a versatile and wide-ranging prospector, surveyor and explorer who was investigating the area for stock grazing. Hann, then about 60 years old, entered the Broadhurst Range, just north of the park, on 31 May, 1897. He continued south to the river, then north-east to Lake Misery (later renamed Lake Dora by Rudall after his fiancee Dora Müller). He tried his hand prospecting for gold near Mt Eva before heading south to the McKay Range and then westwards. As he approached the area near Hanging Rock, and was running short of water, he saw smoke in the distance. He followed the smoke and 'bumped into' Rudall and his search party in a place later named Meeting Gorge. Rudall described him as, "a hardy old bushman". Apart from naming the Rudall River, Hann also named several other features in the park including a variety of mounts, lakes and ranges after Eva Broadhurst—the one-time owner of Pyramid Station whose grave can still be found near the homestead, and for whom Hann held a fondness and deep respect.

THE ABORIGINES LEAVE

In the following years there were several other explorations in or near to the Rudall River—the most notable being the exploration and establishment of the Canning Stock Route. The first geological survey of the area was in 1908–9 by W H B Talbot. It was these explorations and the uptake of pastoral leases that led to the migration of Aboriginal groups from the desert to outlying stations and settlements. Aboriginal groups began leaving the desert in droves as early as the start of this century. They were attracted to the Europeans by prized materials and sometimes food. Most returned to their lands, but others, whose lands were alienated by leases, were encouraged to

stay and work on stations or mining leases. Jigalong, which was originally a depot on the No.1 Rabbit Proof Fence, became a ration issue point for Aborigines in the early 1900s, and by 1930 was beginning to attract desert people from farther east. During the 20 years after World War II virtually all the western desert Aborigines left their country. Jigalong became a Christian mission and, by 1950, was attracting Mandjildjarra people from east of the lakes. Other missions sprang up at Strelley and La Grange, north-west of Rudall River near the coast. A string of waterholes from the Canning Stock Route along the Rudall River and down to Talawana Station became the major exit route as the Warnman and Mandjildjarra people left their traditional homelands.

Another factor in the movement of Aborigines from the desert was the establishment of a rocket testing site for the British Government in the late 1950s and early 1960s. One rocket was reported to have gone off target, falling to earth near Lake Percival and frightening a group of Aborigines there for several days. By the mid-1960s, when the last groups had emigrated or been evacuated from the deserts, the main area of residence was the Rudall River, because of its good water and food resources. This area became the final staging place for a mixed group of Aborigines from the original language groups as they headed for the missions and stations, or farther afield to outback towns.

. . . AND RETURN

During the 1980s, a number of Aboriginal groups began returning to the Rudall River area. In 1982, a group from Strelley returned to an area near Lake Dora. This settlement is now known as the Punmu community, and elders from the group make periodic visits to significant areas to ensure the maintenance of ceremonial and other sites.

Towards the end of 1984, a group of Aborigines from the Jigalong Reserve moved into the National Park and established a community at Cotten Creek, near Mt Cotten. This settlement is known as the Parnngurr community. These groups are now well established within the national park.

MINING & EXPLORATION

Mineral exploration began in the late 1960s. Platinum was discovered near the junction of Dunn Creek and Rudall River in 1971 and in the same year exploration for gold and other base metals began around Yandagooge Hill and Cotten Creek. In 1972, the discovery of gold at Telfer, north of the park, led to an increase in exploration activity and by 1974 continuous exploration was under way by a number of companies. One major tenement holder was CRAE, who had been conducting multi-commodity exploration intermittently since 1972.

Above: Spinifex and red sand are synonymous with the western desert areas of WA.

Above Left: Desert-dwelling Aborigines still use 'fire-stick farming' methods to promote growth of food plants.
Photos – Jiri Lochman

Left: The rugged hills of the Fingoon Range contrast the spinifex and sand in other areas of the park.
Photo – Marie Lochman

The Rudall River National Park was declared on 22 April 1977. Seven months later, in November 1977, it was declared open for mining—the only national park in WA so declared.

In 1983, CRAE acquired title in the Kintyre area. The most significant ore body identified was the uranium deposit discovered 700 metres inside the park boundary in 1985. Activity in this area was halted while meetings and social impact studies were conducted to identify the effects, if any, that mining would have on the Aboriginal people.

In 1992, a section in the north-west of the park was excised for the Kintyre uranium mine, and a slightly larger area was added to the western boundary.

VISITING RUDALL RIVER

Since those earliest visits 100 years ago by Rudall and Hann, there have probably been few other visitors except for pastoralists, prospectors, mining surveyors and naturalists until the creation of the Telfer townsite in 1975. Since then, there has been an increasing (but still very low) number of people visiting the park for recreation.

Nevertheless, it must be stressed that you should not visit the park unless you are well prepared and have sufficient food, water, medical and mechanical supplies. There are no facilities for visitors by way of fresh water supplies, signage, park ranger services, camping facilities or picnic areas, and neither the mining companies nor the Aboriginal communities have stores of food, water or fuel for travellers.

Travellers in remote areas such as this are advised to attend one of CALM's Bushcraft Courses (see Bush Telegraph in this issue). The course provides a basic understanding of the skills required to survive in outback Western Australia and how to prevent a mishap becoming a disaster. If you do decide to visit the park, make sure that you contact CALM's Karratha office giving details of your route and your expected date of exit from the park, and be sure to notify the office as soon as you can after leaving the area. This is a precautionary measure for your safety.

Contact with the Aboriginal communities at Lake Dora and Cotten Creek should be avoided if possible. There are signs at the approach road to the communities asking visitors to stay away unless prior arrangements have been made. It is not that the communities are inhospitable, rather that they are attempting to live in as near a traditional way as possible by maintaining their cultural connections with the land, free from outside influence.

As the sun goes down, the desert sands cool. Later at night, the dunes come alive with wildlife.
Photo – Marie Lochman

The Rudall River National Park is a beautiful and haunting place, rich in history and culture. This ancient land is one of only a few areas in Australia that remain rarely visited. Its secrets are known only to all but a few hardy travellers, scientists, researchers and explorers, and of course, the traditional Aboriginal groups, who have lived there for tens of thousands of years.

David Gough is a communications officer in CALM's Corporate Relations Division and Editor of *LANDSCOPE*. David has a keen interest in the history of the Rudall River area and is currently working on the collected writings of William Frederick Rudall. He can be contacted by phone on (09) 389 8644, by e-mail at davidg@calm.wa.gov.au or by fax on (09) 389 8296.

Articles and papers used in researching and writing this article include: *Social Impact Study of Western Desert Rudall River Region* by Newman, Wright, Lantzke and Dowling (1993); *The Significance of the Karlamilyi Region to the Martujarra of the Western Desert* by The Western Desert Working Group (1989); *Rudall River National Park Resource Inventory and Recommendations for Management* by B G Muir (1982); *Wildlife of the Great Sandy Desert, Western Australia*, edited by Burbidge and McKenzie (1993); and the unpublished writings of W F Rudall. The assistance of CALM's Jim Williamson and WA Museum's Peter Bindon is gratefully acknowledged.

LANDSCOPE

VOLUME TWELVE NUMBER 3, AUTUMN 1997

Aquatic bugs are helping scientists to determine the health of WA's waterways. See Spineless Indicators on page 49.

CALM's new Marine Conservation Branch gets in deep (page 10) to play its vital role in safeguarding the health of WA's unique marine environment.

Called 'Karlamilyi' by desert Aborigines, Rudall River National Park (page 28) is steeped in history and bristling with wildlife.

The economic, social and conservation potential of Acacia in WA , a story of a golden future on page 16.

Fancy a walk? Join us while we look at the environment, history and building of a new Bibbulmun Track. See page 36.

FEATURES

REGULARS

COVER

The tiny pebble-mound mouse of the Pilbara (see story on page 42) is a tireless night-worker and the architect of many odd, red gravelly mounds, which look like miniture volcanoes among spinifex.

Illustration by Philippa Nikulinsky

Managing Editor: Ron Kawalilak
Editor: David Gough
Story Editors: Verna Costello, Mitzi Vance, John Hunter
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Cartography: Promaco Geodraft
Marketing: Estelle de San Miguel ☎ (09) 334 0296 Fax: (09) 334 0498
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