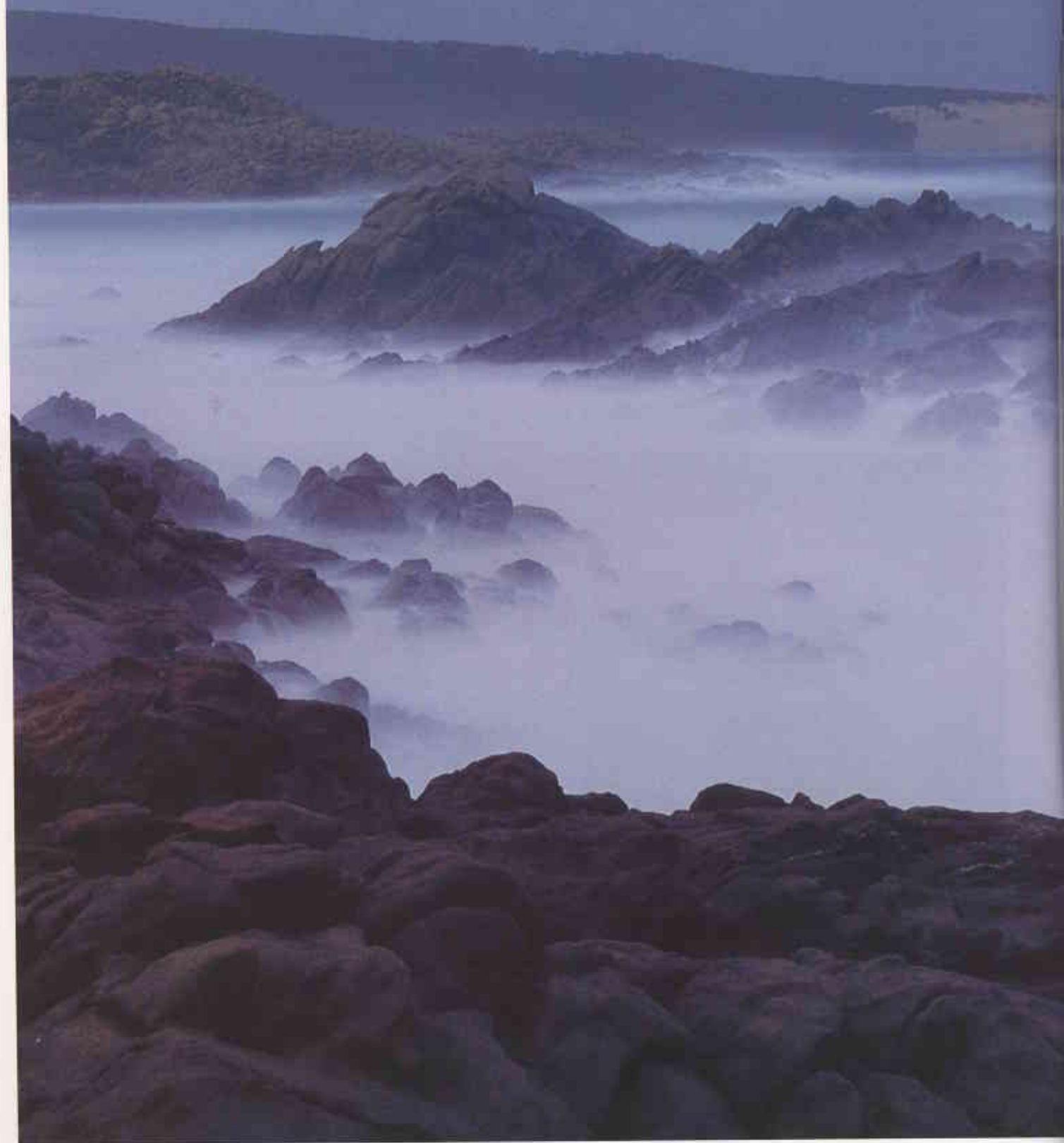



FEAST FOR THE SOUL





There are white sandy beaches interspersed with dramatic coastal cliffs. There is sparkling water and crashing surf.

In winter and spring, whales can be seen launching themselves from the water or lolling about in the shallow bays.

There are hundreds of caves filled with jewel-like formations.

Yet these are only a few of the many attractions of

Leeuwin-Naturaliste,

the most visited

national park in

Western Australia.



Leeuwin-Naturaliste National Park stretches for 120 kilometres between two prominent capes—Cape Leeuwin and Cape Naturaliste. The park had its beginnings in the early 1930s. More land has gradually been added and today it comprises more than 19,000 hectares of coastal grandeur. Nearly all of the coastline between the capes, excluding the townsites of Yallingup, Smiths Beach, Gracetown and Prevelly Park, is included in the park. Its width varies from a narrow strip of only 100 metres in places, to more than five kilometres in the Boranup Forest.

Leeuwin-Naturaliste has the highest visitation of any park in Western Australia, with more than one million park visits each year. There is nowhere else like it in the State. It offers a rich tapestry of rugged coast, beaches, wild bushland, caves, forests, and historic and archaeological sites, which abut more developed areas such as resorts, vineyards, farms and attractive townships. Parts of Boranup and some sections of the coastline are still relatively inaccessible and wild, but much of the park is easily visited on foot, road or four-wheel-drive track. The region (the park together with the nearby farmland and towns) is still a largely unspoilt haven to which city dwellers, interstate and overseas visitors regularly flee to restore a sense of spiritual balance to their lives. It is a feast for the soul.



GEOLOGY

The Leeuwin-Naturaliste Ridge is a major feature of the national park, running from north to south between the Capes, roughly parallel to the coast, and up to 200 metres high. This ridge is composed of two very different rock types. Granitic rocks, more than 600 million years old, form the basement of the ridge. Over these rocks, on most of

the western side of the ridge, is the Tamala Limestone formation, which has consolidated from windblown sand dune deposits within the last two million years.

As the soluble limestone lies on granitic base rocks that are almost impermeable, groundwater concentrates in streams that flow in cavernous channels just above bedrock. Hence, a system of caves has formed throughout the ridge. These caves contain the remains of marsupials that have long been extinct in Western Australia, including the giant echidna (*Zaglossus hackettii*), thylacine (*Thylacinus cynocephalus*), Tasmanian devil (*Sarcophilus harrissii*) and koala (*Phascolarctos cinereus*). Associated with the marsupial remains are human teeth and bone fragments of great antiquity.

HISTORY

Aboriginal occupation of the Leeuwin-Naturaliste area dates back at least 40,000 years. This is reflected in the names of many sites such as Yallingup, which means 'place of love', Meekadarabee 'the moon's bathing place' and Boranup 'place of the dingo'. Nearby



Previous page

Main: Wyadup.

Photo – Alex Bond

Insets: Tall lobelia (*Lobelia gibbosa*).

Photo – Chris Garnett/CALM

Aerial view of Cape Naturaliste.

Photo – Geoff Taylor/Lochman Transparencies

Above: The first homestead between the Capes, Ellensbrook, now lies in Leeuwin-Naturaliste National Park.

Photo – Dennis Sarson/Lochman Transparencies

Left: Caves in the limestone along the Leeuwin-Naturaliste ridge.

Photo – Brett Dennis/Lochman Transparencies



Cowaramup is the place of the parrot (cowra) or purple-crowned lorikeet, which brought fire to Earth. Injidup comes from the Nyoongar word (inji) for the lovely red pea flower (*Templetonia retusa*), which grows along the limestone cliffs in winter. To Aboriginal people this area was a land of plenty, providing local tribes with a rich smorgasbord of edible plants, wildlife and fish.

Mariners aboard the Dutch ship *Leeuwin* made the first European sighting of the south-west in 1622. The theory that at least some of the crew went ashore was substantiated by the finding of a seventeenth century Dutch clog at Flinders Bay in 1930. The Dutch were followed by the French and the English in the 1790s and the early 1800s. French names dominate the coast between the Capes—de Freycinet, Hamelin, Mentelle, Clairault, Naturaliste—although it was an Englishman, Matthew Flinders, who first accurately charted much of the coastline. Eventually the English settled the area, first at Augusta in 1830, and soon afterwards on the Vasse River (later Busselton).

Alfred and Ellen Bussell established Ellensbrook—the first homestead between the Capes—in 1857, and they farmed successfully there for eight years before moving to Wallcliffe House on the Margaret River. Other settlers gradually followed, until the population exploded during a timber boom of the 1890s. Timber tycoon Maurice Coleman Davies exported jarrah and karri wood from Augusta and Hamelin Bay. It was at this time that the lighthouses were built—Leeuwin in 1895 and Naturaliste in 1903—warning ships away from this wild coastline. The many wrecks offshore



testify to the fickle weather and swells.

The region has long been a place of recreation. Fishers wound their way along sandy bush tracks to the beaches long before there were roads, and named their favourite spots—such as Cosy Corner, Bobs Hollow and Contos—adding another layer to the tapestry.

WILDFLOWERS AND WILDLIFE

Despite the immense popularity of the Leeuwin-Naturaliste area, the ridge remains home to several rare and restricted plants, animals and ecological communities. Orchids are especially plentiful, including two of the rarest

Above: Exquisite Meekadarabee Falls is a short walk from Ellensbrook Homestead.

Photo – Chris Garnett

Above left: Western grey kangaroos are common in the park.

Photo – Jiri Lochman

orchids in the State. Despite many searches, Bussell's spider orchid (*Caladenia busselliana* ms) is only known from two small populations at the northern end of the park. Dunsborough spider orchid (*Caladenia viridescens* ms) is found only in a few scattered localities in the Dunsborough area. Naturaliste nancy (*Wurmbea calcicola*) is found in



a few small pockets, mostly in the north of the park. Interim recovery plans are being implemented to conserve these three species.

Many small animals on the ridge are making a comeback due to the success of the Department of Conservation and Land Management's (CALM's) Western Shield program, which controls introduced foxes by baiting with 1080, a poison that occurs naturally in certain native pea plants. The chances of spotting a quenda (southern brown bandicoot) during the day or a wambenger (brush-tailed phascogale) or western ringtail possum at night are increasing. The numbers of chuditch on the ridge are growing, and other exciting finds could yet be made in isolated pockets of dense

vegetation. Western grey kangaroos are plentiful, and brushtail possums make regular visits to forest campsites, especially Point Road.

Sugarloaf Rock is the southernmost breeding site for small numbers of red-tailed tropicbirds. These oceanic birds are usually solitary, roaming the tropical waters between the western Indian Ocean and the mid-Pacific, only forming loose communities at nesting time.

CAVES OF THE CAPE

You can visit several caves on the ridge. Two self-guided unlit caves, Calgardup and Giants, were tourist caves at the turn of the century and are now managed by CALM. Visitors should wear old clothing and sturdy footwear

and first call in at the Calgardup Information Centre (open daily). Torches and hard hats are supplied.

Calgardup Cave is spectacular because of the water that covers the floor of three caverns. The reflections on the water surface are something to see. Elevated platforms throughout the cave allow people to enjoy the exquisite beauty at their own pace and without a guide, staying on established paths. Adventure sections of Calgardup Cave can be explored with a guide, which can be arranged by talking to staff at the entrance.

Giants Cave has huge caverns and is about 800 metres long. You can enter through a spectacular doline (collapsed solution pipe) and reappear out of another. Elevated platforms and marked paths are provided, so getting lost is not an issue. There are numerous spots where cavers can stop, relax and absorb the world-class cave formations. Giants Cave is a little more physically challenging and is open at busy times. Check by telephoning the Calgardup Information Centre on (08) 9757 7422.

Tours of adventure caves, which need a trip leader, are run through the Calgardup Information Centre. Guided tours of lit caves, such as Ngilgi, Mammoth, Lake and Jewel Caves, are run by the two local tourist associations. At Mammoth Cave, about 21 kilometres from Margaret River, the WA Museum has found several fossils left there by Aboriginal people who used the entrance cavern for shelter. The jawbone of an extinct marsupial about the size of a cow is visible in the cavern wall.

LANDFORMS

Cape Naturaliste, at the northern tip of the Leeuwin-Naturaliste Peninsula, has its own walktrail network, historic lighthouse and whale-watching lookout, and is one of the park's major attractions. Nearby Sugarloaf Rock is a granite island shaped like a cone of sugar (the form in which sugar was once sold). While there is no access to the island itself, its



Above left: Calgardup Cave is an unlit cave that can be explored without a guide. Photo - Michael James/CALM

Left: Weathered limestone cliffs near Cape Leeuwin. Photo - Brett Dennis/Lochman Transparencies



unusual shape and the rugged coast around it make it a popular scenic spot.

At Canal Rocks, granitic rocks jut into the ocean and are separated by a series of canals that have been hollowed out by the sea. You can cross the canals by a series of recently upgraded narrow bridges and carefully clamber over the rocks to marvel at the ocean's relentless power.

It is thought that around 600 million years ago, the original rocks here were subjected to intense heat and pressure, causing changes in their structure and mineral composition. They became layered and folded, forming bands of varying hardness lying roughly parallel to the present coastline. Bands of weaker rock have been eroded more easily by the sea, creating the spectacular 'canal' formation.

CAPE TO CAPE WALK TRACK

One of the lesser-known tourist attractions of Leeuwin-Naturaliste National Park, but one set to increase in popularity, is the Cape to Cape Walk Track. The Track stretches for 140 kilometres from Cape Naturaliste to Cape Leeuwin. Walkers can embark on a hike of several days duration, or

Above: Pineapple bush (*Dasypogon hookeri*).

Photo – Chris Garnett/CALM

Above right: The waterwheel near Cape Leeuwin once pumped water to the lighthouse.

Photo – Chris Garnett/CALM

Right: Conglomerate near Cowaramup Bay.

Photo – Alex Bond



choose from a multitude of alternative shorter walks of varying distance and difficulty, beginning with walks of just a couple of hours.

The track is pleasantly challenging and takes walkers through breathtaking coastal scenery. Next time you are visiting the Leeuwin-Naturaliste area try one of the shorter Cape to Cape Walk Track sections for a different

perspective on your holiday. Brochures for each of the five sections (each up to 31 kilometres long) are available from CALM's *WA Naturally* outdoors information centre in Fremantle, from CALM's offices in Busselton and Margaret River or from tourist outlets for a nominal fee.

The Cape to Cape Walk Track has attracted an enthusiastic Friends Group,





which helps CALM maintain and upgrade the track. Groups are 'adopting' sections for maintenance purposes.

BORANUP FOREST

Boranup Forest, within the Leeuwin-Naturaliste National Park, lies between Caves Road and the coast, and creates a powerful contrast with the rest of the coastline. Pale-barked karri trees, reaching heights of 60 metres or more, dominate the slopes and valleys. Gravel roads wind through the forest to picnic and camping spots. A short walk leads to Boranup Lookout, which gives sweeping views over the forest and coast west to Hamelin Bay.

Boranup is the farthest west that karri, the third tallest tree in the world, grows. The forest is isolated from the main karri belt, situated more than 100 kilometres to the east, by the grey infertile sands and lower rainfall of the Donnybrook Sunklands and the Scott River coastal plain.

Boranup is a regrowth forest, less than 120 years old. The Government granted Maurice Coleman Davies a 42-year lease to take timber from Boranup in 1882. The Hamelin Jetty was built promptly, 600 metres long and capable of berthing three ships at a time. The Karridale Mill, the most advanced in the colony, began operations in 1884. In 1891, a new steam mill was commissioned at Boranup, but was destroyed by fire a few years later and replaced with a bigger one at Jarrahdene in 1895. The last mill at Karridale closed in 1913. In 1961, fierce fires seared through Boranup Forest and destroyed

the last traces of Karridale, which once housed more than 800 people. The timber yard at Hamelin Bay is now a camping area, shaded by coastal peppermints, and remnants of the jetty still stretch out into the bay.

MANAGEMENT CHALLENGES

Visitors to the Capes region typically move in and out of the national park as they travel along Caves Road and stop to visit numerous natural features within the park and other tourism features just outside its boundaries. For example, a visitor could begin at Cape Naturaliste (in the park) head to Yallingup Beach (outside the park) then to Canal Rocks (in the park) before going to a nearby winery (outside it). In fact, it would probably be fair to say that the majority of people who use the Leeuwin-Naturaliste National Park aren't even aware of its extent or status.

The park is elongated and composed of numerous Crown reserves interspersed with many long, narrow privately owned blocks. The Leeuwin-Naturaliste National

Boranup Forest has regrown after extensive logging from 1884 to 1913.
Photo – Brett Dennis/Lochman Transparencies

Park probably has more adjacent neighbours than any other national park in the State. And if you take into account the wider community, not just locals, but the hundreds of thousands of people from elsewhere in the State who love and regularly holiday in and around the park it certainly has more stakeholders than any other national park in the State.

The park has been managed by CALM for 10 years, and the management plan for the park is now up for review. Major issues for the future will continue to be the increasing levels of visitation and the management of the often-conflicting demands for services that these large numbers of visitors require. The protection of the park and the valuable adjoining property is a major concern, and fire management will always be an important aspect of maintaining the diverse mosaic of landscapes and vegetation communities, which depend on fire to regenerate.

Leeuwin-Naturaliste National Park also abuts some of the most expensive real estate in Western Australia. There is unfortunately much potential for uncoordinated development to occur, especially on freehold land, some of which extends within a short distance of the coast. It is hoped that despite these pressures, and with the cooperation of all levels of government and the community, it will still be possible to preserve the natural beauty and integrity of the landscape. This will allow visitors to continue to come to this beautiful area in perpetuity, to renew their spiritual connection with nature.

Neil Taylor is Parks and Recreation Officer for CALM's South West Capes District and is the architect of the Cape to Cape Walk Track. He also has a long involvement in the caves of Leeuwin-Naturaliste.

Jane Scott is the author of *Walking the Capes*. She is the inaugural Chairperson of the Cape to Cape Friends and can be contacted on (08) 9757 6327.

Carolyn Thomson-Dans has written and edited numerous CALM books about WA's parks and wildlife. She can be contacted on (08) 9389 8644 or by email (carolynt@calm.wa.gov.au).

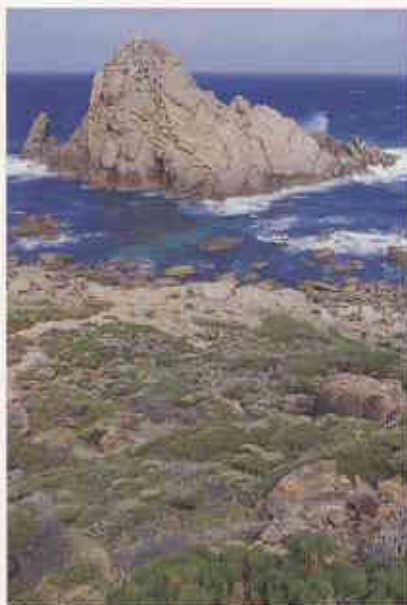
Roger Banks is Manager of CALM's South West Capes District. He can be contacted on (08) 9752 1677.

Friends of the Cape to Cape Track can be contacted on (08) 9757 6327 or by writing to The Secretary, PO Cowaramup 6284.

Winner of the 1998 Alex Harris Medal for excellence in science and environment reporting.

LANDSCOPE

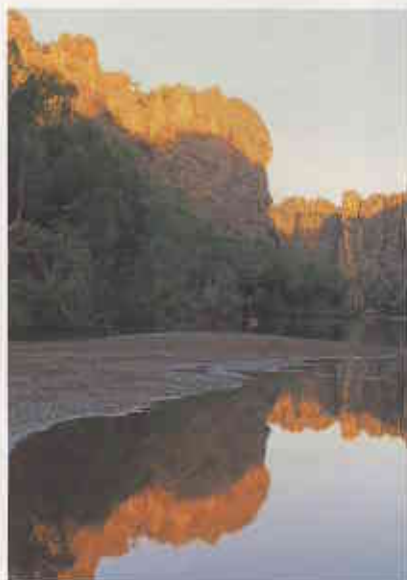
VOLUME SIXTEEN NUMBER 1, SPRING 2000



Sugarloaf Rock is just one of the many features that make Leeuwin-Naturaliste National Park the most visited park in WA. (See page 10.)



Premier Park: John Forrest National Park is Western Australia's oldest park, celebrating its centenary year. (See page 22.)



Windjana Gorge National Park holds important clues to the evolution of fish. See 'Old Fossils' on page 28.



Pinnacle of Parks: These unusual formations make Nambung National Park well known the world over. (See page 36.)



William Bay National Park displays a miniature version of karri forest flora. (See page 42.)

C O V E R

With 67 national parks spread across the State, park rangers are often the first contact that visitors have with the Department of Conservation and Land Management (CALM). Apart from providing visitors with information and guidance, they perform a vital role in the day-to-day management of their local environment.

Cover illustration by Gooitzen van der Meer, Western Australian artist and a graphic designer with CALM.



F E A T U R E S

FEAST FOR THE SOUL

NEIL TAYLOR, JANE SCOTT, CAROLYN THOMSON-DANS & ROGER BANKS.....10

PLACES OF NATIONAL IMPORTANCE

JOHN HUNTER.....17

PREMIER PARK

GEORGE DUXBURY.....22

OLD FOSSILS

JOHN LONG.....28

PINNACLE OF PARKS

KEN McNAMARA & CAROLYN THOMSON-DANS.....36

KARRI FOREST IN MICROCOSM

NEVILLE MARCHANT.....42

THE WAY AHEAD

MANDY CLEWS, JIM SHARP & WAYNE SCHMIDT.....48

R E G U L A R S

BUSH TELEGRAPH.....4

ENDANGERED

HEATH COMMUNITY ON NOONDINE CHERT HILLS.....35

PARK ANTICS.....54

Executive Editor: Ron Kawalilak

Editors: David Gough and Carolyn Thomson-Dans

Story Editors: Caris Bailey, Mandy Clews and Verna Costello

Scientific/technical advice: Andrew Burbidge, Keith Morris, Paul Jones and staff of CALMScience Division

Design and production: Tiffany Aberin, Maria Duthie, Gooitzen van der Meer

Illustration: Ian Dickinson, John Long, Gooitzen van der Meer

Marketing: Estelle de San Miguel ☎ (08) 9334 0296 Fax: (08) 9334 0498

Subscription enquiries: ☎ (08) 9334 0481 or (08) 9334 0437

Colour Separation by Colourbox Digital

Printed in Western Australia by Lamb Print

© ISSN 0815-4465 All material copyright. No part of the contents of the publication may be reproduced without the consent of the publishers.

Please do not send unsolicited material to *LANDSCOPE*, but feel free to telephone the Editor.

Visit *LANDSCOPE* online on our award-winning Internet site NatureBase at <http://www.naturebase.net>



Published by
Department of Conservation and Land Management,
Dick Perry Avenue, Kensington, Western Australia