# of mists and mountains

by John Watson

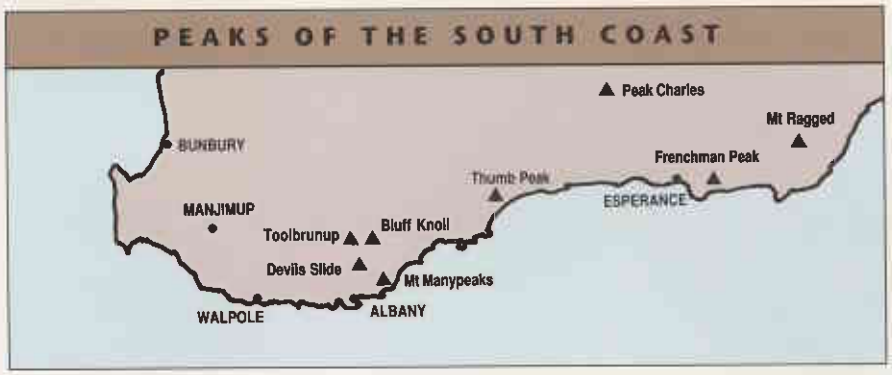
Compared with Mt Everest, the Matterhorn and the Himalaya, Western Australia's mountains are tiny. But they far outweigh the massive barren peaks of other lands in biodiversity and conservation value. Unfortunately, the human impact on them is much more telling...

John Watson takes us on a path into the mountain mists of the south coast, where every step we take is precious.

Mountains were once thought to house evil spirits who hurled rocks or avalanches of snow at anyone who dared venture near them. In the mountains of Scotland people still claim to see and hear the ghost of the Great Grey Man of Ben MacDhui, or Ferlas Mor, as he is called in Gaelic. Some Aboriginal legends also feature mountains, though not necessarily with evil spirits; the sleeping warrior in the Stirling Range is a good example.

In time, mountains inspired artists, poets, and eventually photographers. As people began to test human limitations, mountains became a new frontier in adventure, leading many climbers to their deaths. Today, mountains are considered a thing of beauty as well as an unpredictable environment demanding respect. People visit them to bushwalk, rock-climb, study nature, photograph the wilderness and even hang-glide.

The mountains of the South Coast region of Western Australia are essentially islands of remnant vegetation in a vast ocean of sandplains and heathlands, much of which has been cleared for agriculture. Moreover, these 'remnants' have unique floral associations because of their landform, climate and elevation gradients.



Previous page:
Misty sunrise on Bluff Knoll.
Photo - Robert Garvey

Inset:
Isopogon latifolius in the Stirling Range.
Photo - Michael Morcombe

The rolling contours of Mt Manypeaks (565 m) in the Waychinicup National Park near Albany.
Photo - Michael Morcombe

Being geologically old, Western Australia's small mountains are very rich in species, often much more so than the mountain giants of the world. For example, the Fitzgerald River National Park has more plant species in it than the whole of the British Isles, and a high proportion of species occur in the Barren Ranges, a small group of quartzite peaks near the park's southern coastline. The Stirling Range peaks have many plants found nowhere else, with a large proportion of declared rare species and species in need of special protection. Among the better-known genera are the mountain bells of the Darwinia, about eight species of which are endemic to the Stirling Range, some found only on specific peaks in the range.

Closer to the coast with its marine influence, the Waychinicup National Park, including Mt Manypeaks, has almost the same floral diversity as the Stirlings despite being only one-tenth the area and a little over half the vertical elevation range.

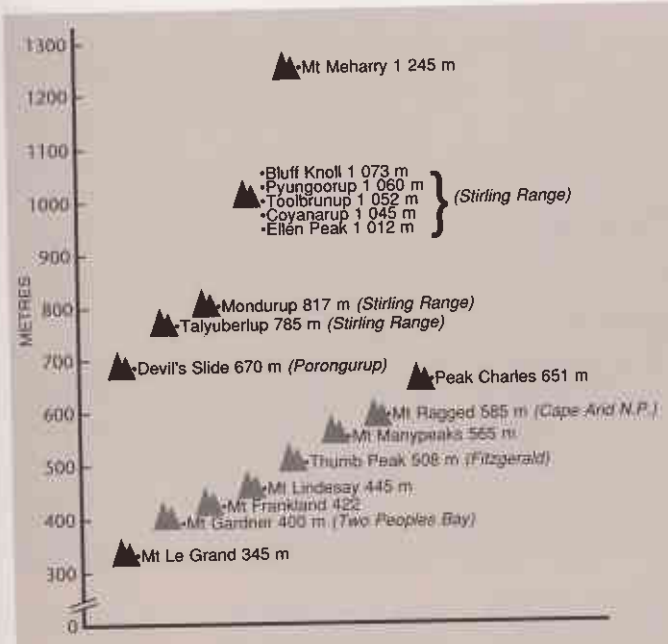
As well as a high degree of plant biodiversity, Western Australia's mountains contain populations of relic Gondwanaland fauna. There is a limited amount of research on invertebrates in mountainous regions, but already researchers such as Barbara York-Main have established Gondwanan links for one species of spider between the Stirling Range, Madagascar and Africa. (For information on other fauna of the Stirlings, see *LANDSCOPE*, Winter 1991.)

WALKING A FINE LINE

While mountains appear strong and timelessly resilient, they can be vulnerable. This is especially the case with the mountains of Western Australia's south coast.

Thousands of walkers visit these mountains each year. The most popular places are peaks in the Stirling and Porongurup Ranges, such as Bluff Knoll and the Devils Slide, with a steady trickle of visitors to lesser-known areas such as Mt Ragged, Peak Charles, Mt Manypeaks, and the Barren Ranges of Fitzgerald River National Park.

Human impact has affected these natural areas in several ways; the introduction of dieback disease (seven species of *Phytophthora*) and the



Western Australia's highest point is 1 245 m (4 085 ft) at Mt Meharry in the Hamersley Range (Karajini) National Park. However, it's in the south that some of the State's most spectacular and widespread mountain peaks occur. Here there are five mountains above 1 000 m (3 281 ft), all in the Stirling Range, and a further 33 peaks above 550 m (1 700 ft). These include Mt Ragged (585 m) and Peak Charles (651 m) in the Esperance District, Mt Manypeaks (565 m), about a dozen 'tops' in the Porongurup Range (Devils Slide summit 670 m), and an additional 20 or so lesser peaks in the Stirling Range. There are also a number of much smaller peaks around Esperance in Cape Le Grand National Park (Mt Le Grand 345 m), in the Fitzgerald River National Park (Thumb Peak 508 m), around Albany (e.g. Mt Gardner at Two Peoples Bay 400 m) and, further west, isolated granite peaks such as Mt Lindesay (445 m) and Mt Frankland (422 m).

erosion of popular paths are the main concerns.

It is now well documented that dieback disease can have a devastating effect upon whole genera of local flora, including many of the rare or specially protected species occurring on mountain peaks. Due to their elevation in the landscape and their relative remoteness, many peaks have escaped dieback infection so far. Some, however, especially those which have experienced a high level of recreational use, are now infected with the disease.

With dieback disease's potential spread downslope, the long-term ramifications of such infections are daunting. In the Fitzgerald River National Park an area in the central region of the Barren Ranges (Thumb Peak, Woolbernup Hill and Mid Mount Barren) has been closed to bush walkers to prevent further infection spread. Some parts of other high-value conservation areas such as the Stirling Range National Park may also need to be closed.

In many mountains on the south coast, mountain paths are quite literally wearing out. This is hardly surprising on paths such as that leading to Bluff Knoll in the Stirling Range, with pedestrian-counting machines registering about 20 000 pairs of feet a year. This problem is by no means confined to Western Australia - it is faced in most mountainous regions of the world.

Mondurup bells (*Darwinia macrostegia*) in the Stirling Range National Park.
Photo - Michael Morcombe ▲

Mountain bells (*Darwinia collina*) on Bluff Knoll. The plant is confined to the eastern parts of the Stirling Range.
Photo - Michael Morcombe ►▲

Over the past decade the Department of Conservation and Land Management (CALM) has made contact with mountain managers throughout the world to share up-to-date knowledge and experience about path management and restoration. Paths are surveyed to identify and document specific problems, and restoration work is then undertaken. CALM is now actively seeking funds to implement further restoration of paths in south-coast mountains, with donation boxes installed near path beginnings at such areas as Frenchman Peak in Cape Le Grand National Park, Bluff Knoll in the Stirling Range, and the Gap and Natural Bridge in the Torndirrup National Park.

In the South West Tasmania World Heritage Area, an estimated $1 million is being spent annually on footpath work, and it was recently estimated that $15 million would be required to upgrade all paths in that area. CALM has conservatively put its first target figure for south-coast path restoration at $100 000 per annum. This work is

extremely labour-intensive; unlike road construction, where there is ready access to bulldozers, tip trucks, graders and bitumen tankers, workers on mountain paths have to use picks and shovels and Shanks's Pony.

SUPPORT YOUR LOCAL MOUNTAIN

CALM's work towards dieback control and path repair in the south coastal mountains is increasingly being recognised at home and abroad. But CALM needs public support. Donations are always eagerly received; CALM offices in Albany and Esperance have established Path Restoration Funds for the purpose. And volunteers are warmly welcomed into 'busy bees' on mountain paths.

This work must be done. Mountains are special places, breathtaking and awe-inspiring. But they are vulnerable environments, and many of them are the last stronghold for old, rare flora and fauna. ◘

John Watson is CALM's South Coast Regional Manager, based in Albany. He is an experienced rock climber and walker who has travelled and climbed in mountain areas throughout the world. He is attending an international conference on protected areas and mountain environments in Hawaii later this year, which is sponsored by the East-West Centre (Hawaii), the World Conservation Union (IUCN) and the US National Park Service.

East Mt Barren (299 m) in the Fitzgerald River National Park, clearly showing the old wave-cut platform.
Photo - John Watson

Early morning cloud on the Arrows, Stirling Range National Park. Pyungoorup (1060 m) is in the middle distance and Ellens Peak (1012 m) beyond.
Photo - John Watson

WHAT IS A MOUNTAIN?

The simple definition in the Concise Oxford Dictionary is 'a large or high and steep hill'. Of course the terms *large, high* and *steep* are not defined, and if you look up *hill* in the same dictionary it is defined as a small mountain!

In practice you really have to look at local definitions. In the Himalaya, for example, where the peaks rise to 8 848 m (29 028 ft), mountains are generally required to have summits above 6 100 m (20 000 ft) - anything less than that is a mere foothill!

However, as there are hardly any mountains elsewhere in the world higher than 6100 m ...

Bluff Knoll in profile - at 1073 m, this is the highest peak in south-western Australia.
Photo - Michael Morcombe

LANDSCOPE

VOLUME SEVEN NO. 1 SPRING EDITION 1991

A wave of colour is spreading from Shark Bay to Jurien and inland to Meekatharra. Our story on page 10 takes you into Wildflower Country.

The WA Museum is 100 years old. It houses a staggering four million specimens of insects, marine animals, fish, birds, reptiles and frogs. Page 22.

Seven species of microscopic dieback-disease fungi are attacking WA's unique wildflowers. See page 28.

The rugged Pilbara landscape has some hidden delights. On page 16, go up hill to Hamersley Range, then down Dales and other spectacular gorges.

How does WA's conservation heritage look to the people who look after it? Turn to page 26 for some great photographs from a recent competition run for CALM staff.

COVER

Out now! Wildflowers are blooming in the vast tracts of country north of Perth, especially in the northern sandplains and Murchison, which is experiencing a bumper wildflower season following heavy winter rains. Philippa Nikulinsky's illustration shows some of the wildflowers for which WA is justly famous: the splendid everlasting, buttercup, red leschenaultia, Sturt's desert pea, catspaw, wattle, native wisteria, black kangaroo paw, flame pea, and scaevola - all covered in the newly released book Wildflower Country. *See page 10.*

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