

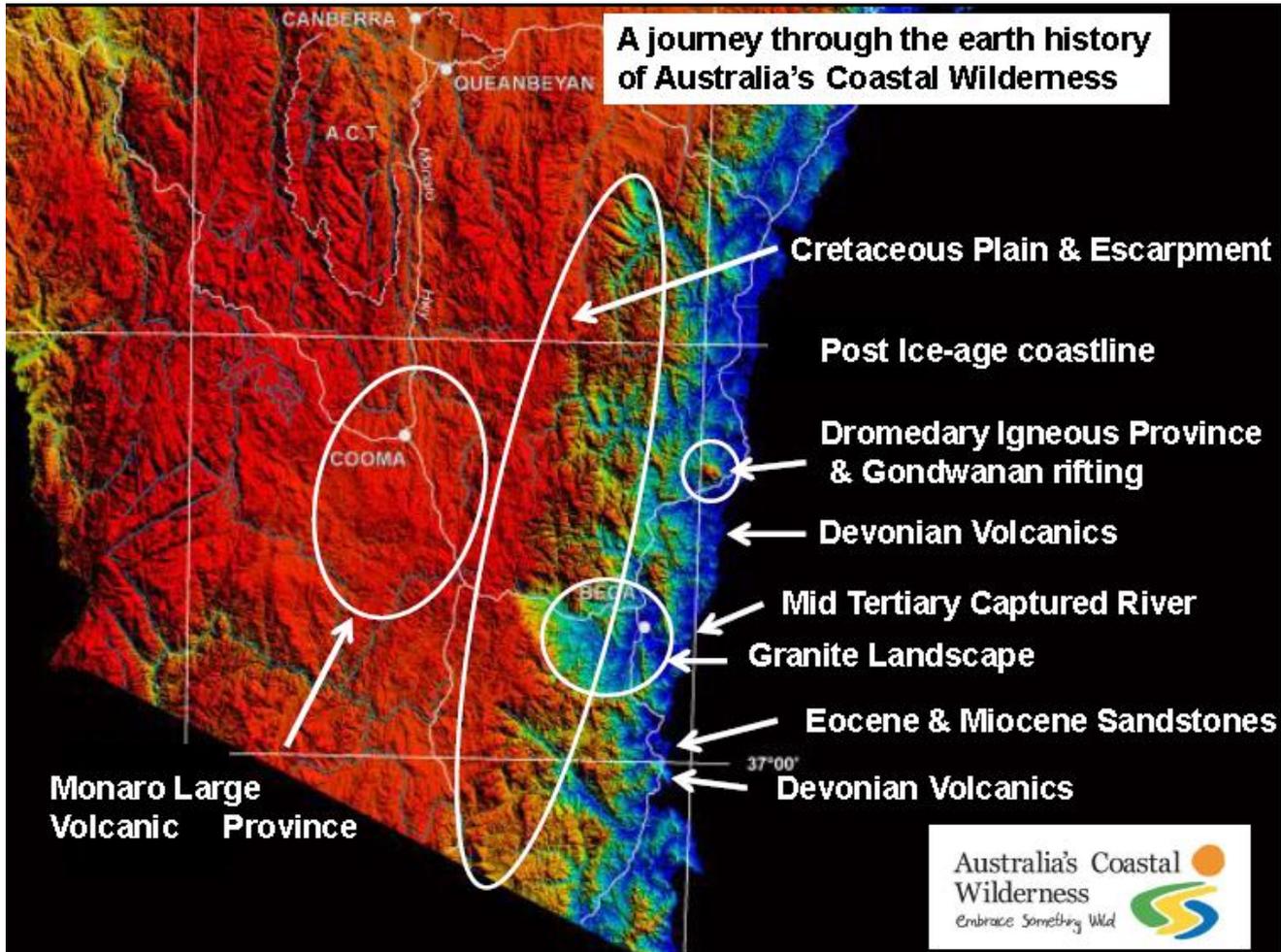
A journey through the earth history of Australia's Coastal Wilderness

Part 1 **INTRODUCTION**

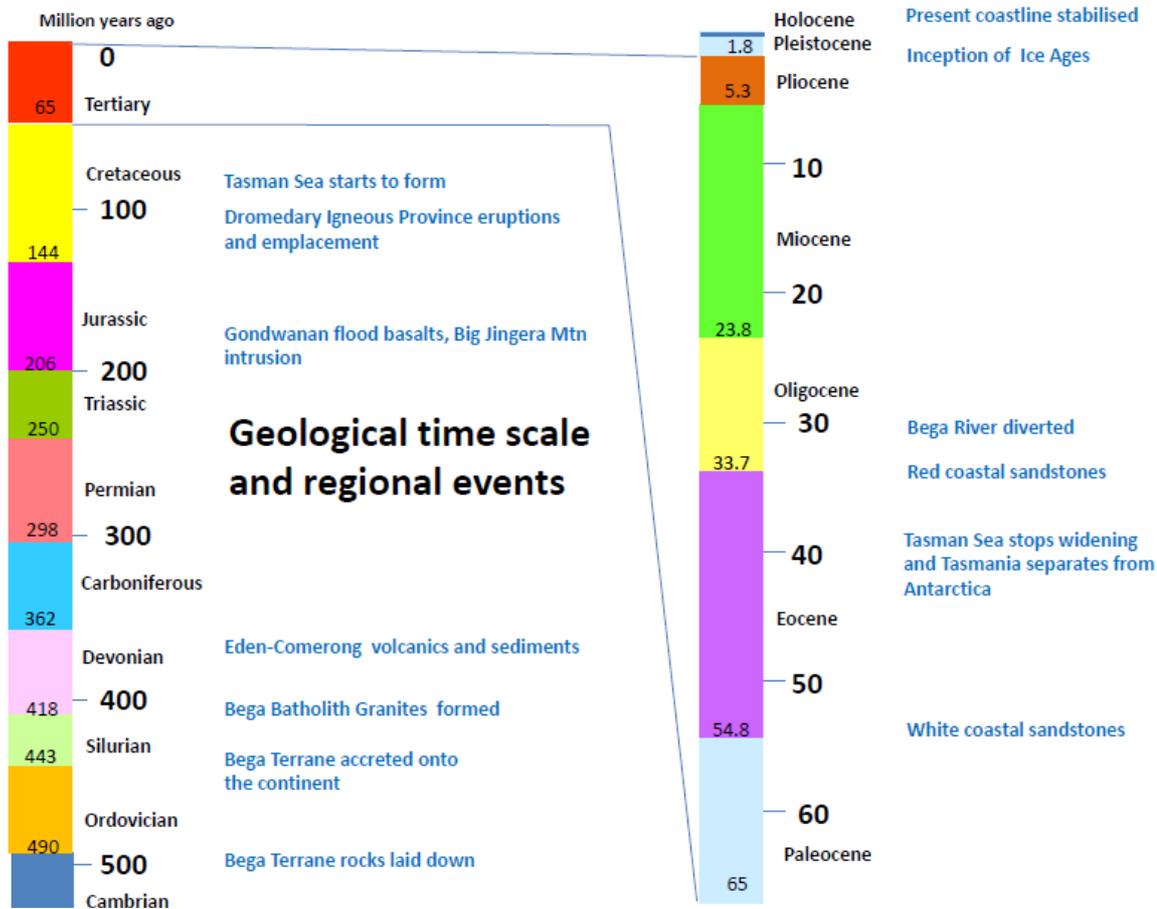
Bruce Leaver
Anne Felton



The Pinnacles, tertiary sandstones, Ben Boyd National Park



Each part of this series has a sketch map at the back of the part showing the location of the geoheritage items discussed.



Introduction

Australia's Coastal Wilderness includes the oldest rocks in eastern Australia, fossil records of some of the world's earliest land animals, forests and diversity of ancient fishes. We can trace the evolution of this part of the Australian continent from a deep ocean through volcanic upheavals and crustal melting to long periods of quiet erosion with the formation of flat plains. Fragments of this half billion year history can be seen not only in rocky cliffs and headlands, but also in the land use patterns imposed by aboriginal and European peoples. During tens of thousands of years of occupation of this region by aboriginal people, sea levels have fallen by 130 metres and risen again, drowning much of the cultural homelands of the coastal peoples. In only a few centuries, white settlers have imposed new patterns of use of the land and its abundance.

On our journey, a geoheritage journey, we will let the rocks and landscapes, the shapes of the coast and the patterns of hills and skylines tell us their stories.

The journey focuses on key features of the landscape and explains why they are there. The journey covers the story of:

- the region's granites,
- the 70 million year old plain into which today's landscape was etched,
- the enigmatic and sacred Gulaga mountain,
- the chain of renowned and beautiful southern coastal lakes,
- the geological floor under laying the region,
- the coastline and the origin of the Tasman Sea,
- ancient volcanoes and armoured fishes, and
- the red and white coastal sandstones and the tale of a 'stolen' river.

Good journeys are enhanced by good maps. The best maps of the region for nature touring are published by Forests NSW. Two maps cover the journey, *South Coast* and *Far South Coast*. They can be purchased at newsagents and many service stations in the region or on the web at: www.dpi.nsw.gov.au/forests/recreation All the geographic locations mentioned in the journey are on these maps.

A useful map for the Victorian component is the *High Country Back Road Tours Guide*, published by the Victorian Department of Sustainability and Environment. The web address is www.customer.service.dse.vic.gov.au

Geological maps are also useful. The NSW part of Australia's Coastal Wilderness is covered by the Bega geological sheet 1995, Bega Metallogenic map, 1975, and at a larger scale, the Narooma 1: 100,000 Geological Sheet 1975. These can be downloaded free or paper copies ordered from <http://www.dpi.nsw.gov.au/minerals/geological/geological-maps>

In Victoria, the Mallacoota 1:250,000 geological sheet can also be downloaded free from <http://dpistore.efirst.com.au/categories.asp?clD=32>. Ordering details are also given at this web address.

The best viewing of rocks that form the region's landscapes is very often from the headlands and cliffs that can be accessed from the magnificent beaches of Australia's Coastal Wilderness. The traveller will find a tide chart to be a useful tool. These are readily available in local newsagents and fishing tackle shops.

The Journey

The Geoheritage Journey is described as travelling from the north to the south, but it can be enjoyed from any direction.

The key features and their earth history are described as the traveller meets them for the first time. Many of these features occur in other locations and what is learned on the first encounter can be applied elsewhere.

There is a wealth of information about the earth science of the journey on the internet. The enquiring visitor will find this is readily accessible using the common search engines.

Technical terms are explained when encountered in the text.

This first edition

This is the first time this fascinating story of geoheritage has been drawn together. It will be, in due course, enhanced by further research into the geology and geomorphology of the region.

This publication is part of the Sapphire Coast Heritage Tourism Strategy and has been prepared with the assistance of a Commonwealth Government tourism grant (the TQUAL program) and partnership with Bega Valley Shire Council.

A significant improvement will be the inclusion of more material on the Victorian component of Australia's Coastal Wilderness. As this information is incorporated into the story an updated edition will be compiled.

The authors

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Dr E Anne Felton is a professional geologist, now retired. She continues her research into rock coasts as a Visiting Fellow in the Research School of Earth Sciences, The Australian National University. Anne has a continuing interest in and commitment to community science education.

The essence of Australia's Coastal Wilderness – the national parks



Over 90% of the coastline is in either the New South Wales or the Victorian national park system. The map shows the coastal national parks, there are also considerable areas of park in the coastal hinterland

The map also shows the web sites of the three tourist associations covering the region. Through these sites the visitor can access accommodation and other visitor facilities and services.

Travelling from north to south:

Eurobodalla National Park

<http://www.nationalparks.nsw.gov.au/eurobodalla-national-park>

Montague Island Nature Reserve

<http://www.nationalparks.nsw.gov.au/montague-island-nature-reserve>

Mimosa Rocks National Park

<http://www.nationalparks.nsw.gov.au/mimosa-rocks-national-park>

Bournda National Park

<http://www.environment.nsw.gov.au/NationalParks/parkHome.aspx?id=N0082>

Ben Boyd National Park

<http://www.nationalparks.nsw.gov.au/ben-boyd-national-park>

Nadgee Nature Reserve

<http://www.environment.nsw.gov.au/NationalParks/parkHome.aspx?id=N0458>

Croajingolong National Park

<http://parkweb.vic.gov.au/explore/parks/croajingolong-national-park>

This series

This series had been assembled as part of the Sapphire Coast Heritage Tourism Strategy and is one of a collection that also includes the region's historic heritage, cultural heritage and geoheritage (the earth history of the region).

The series has been developed under the oversight of a group of interested members of the community and assisted by a grant from the Australian Government under the Tourism Quality (TQUAL) Grant Program. Bega Valley Shire Council are co-partners in the grant project.

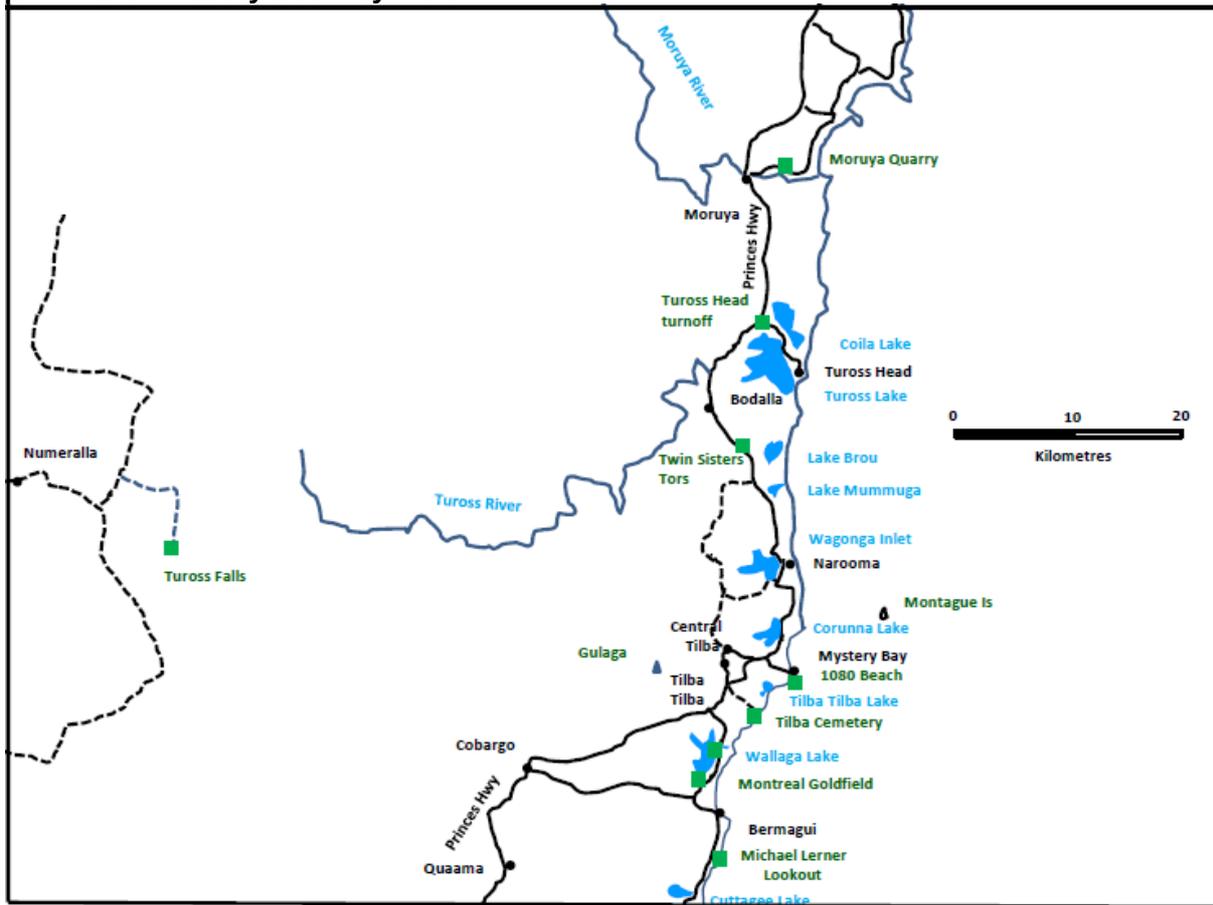


Australian Government
Department of Resources
Energy and Tourism

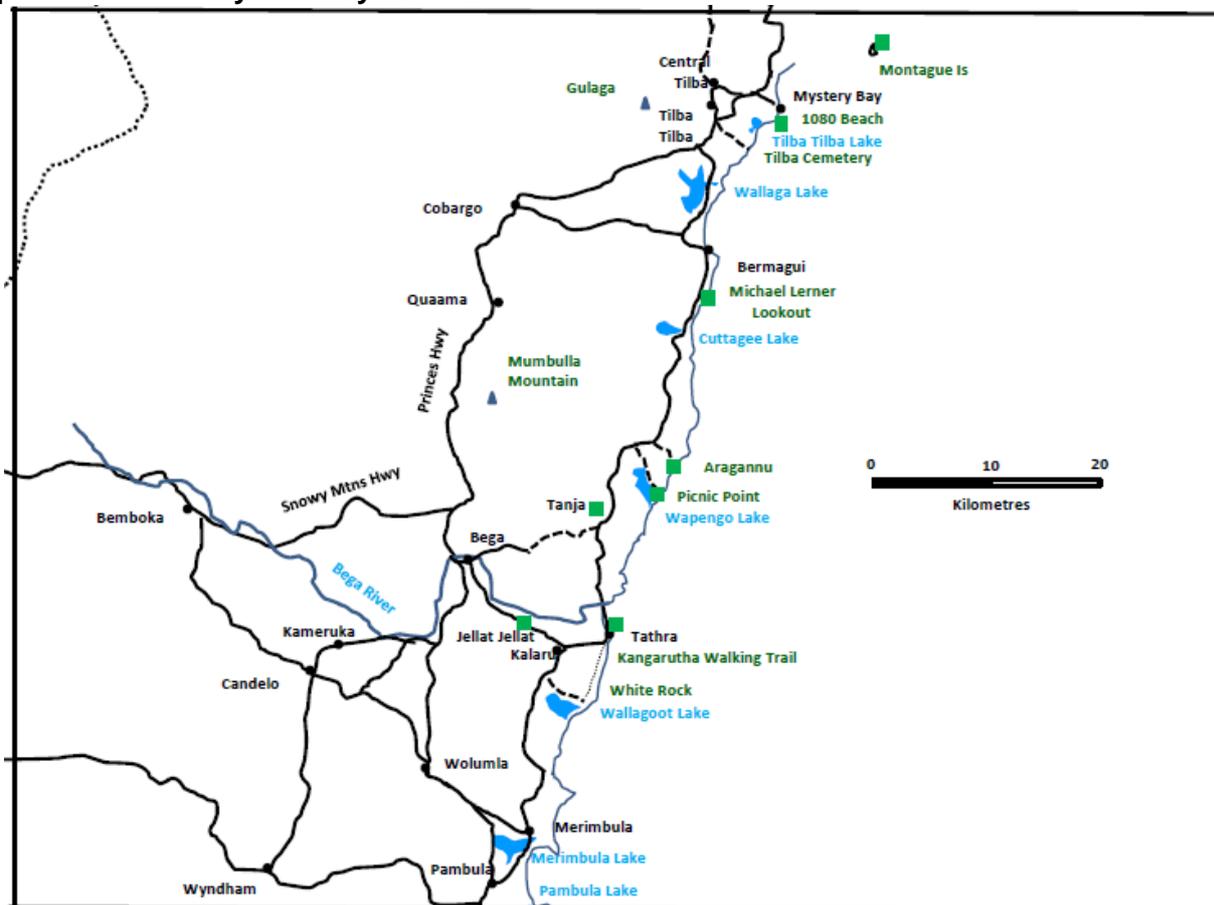
This is a first edition. A later edition will be considerably enhanced by additional material from the Victorian part of Australia's Coastal Wilderness.

The material has been produced without commercial gain by Sapphire Coast Tourism (a not for profit organization) for the purposes of research and study by prospective visitors to the region.

Map 1 – Earth History Journey North



Map 2 - Earth History Journey Central



Map 3 – Earth History Journey South

