

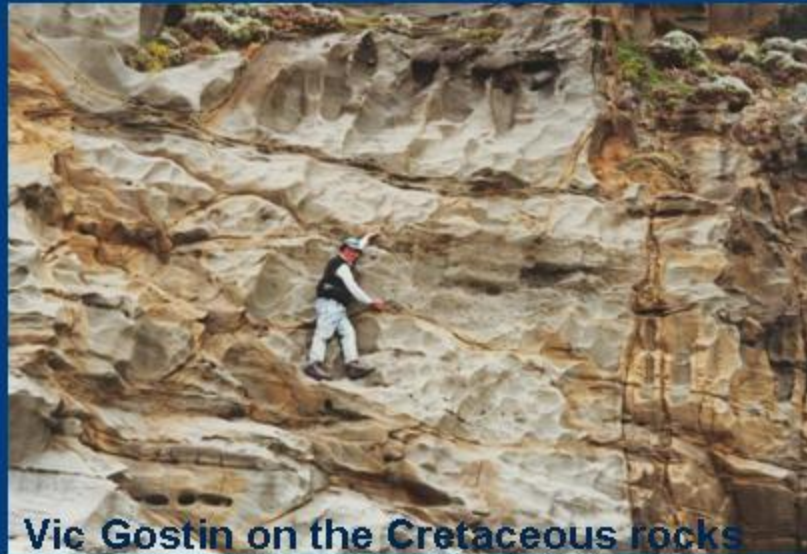
Geotourism in Australia; perspectives from the field



Carol Simpson

Longer Tours

1997: 7 days, Great Ocean Road to Mt Gambier





Vic Gostin on the Cretaceous rocks




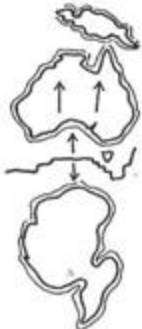
Anne Felton at the "petrified forest"

The School of Earth Sciences at the University of Melbourne presents:

Australia Adrift: the break-up of Gondwana

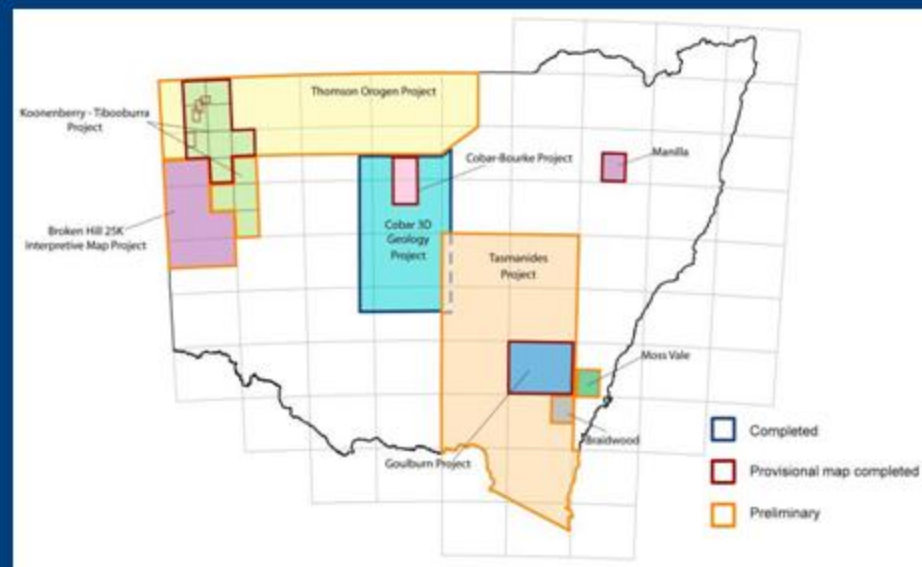
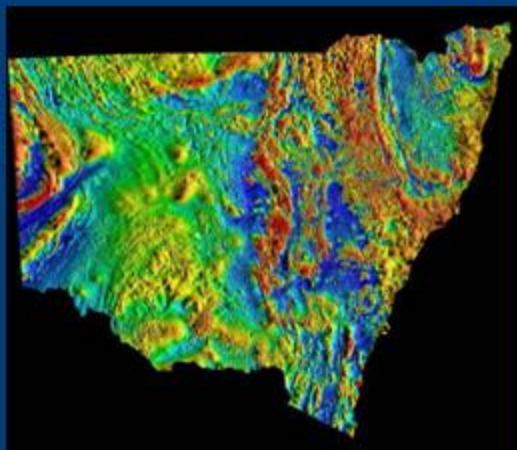


December 7-13, 1997



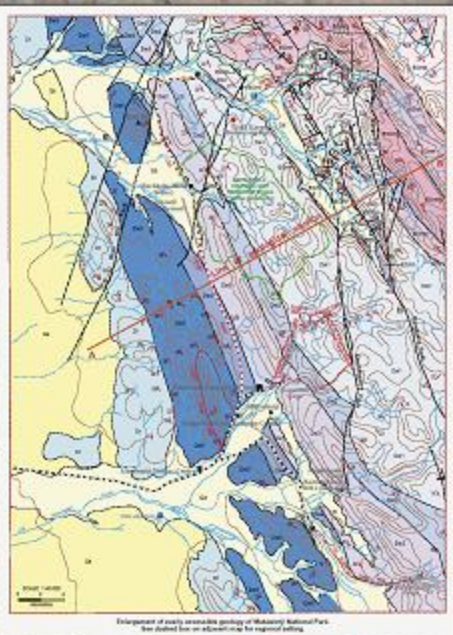
A seven day geological
tour of the southern coastline of
Victoria and eastern South Australia

Tools for Geotourism

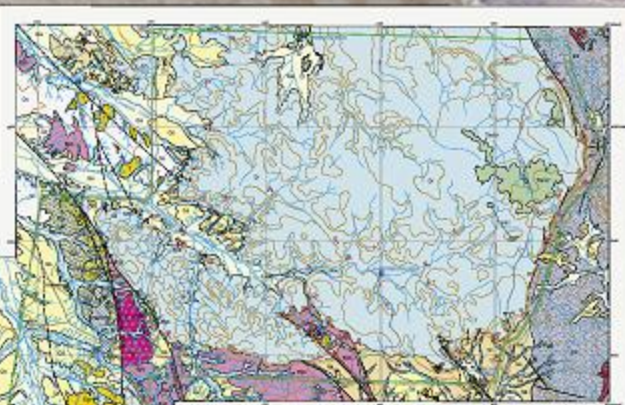
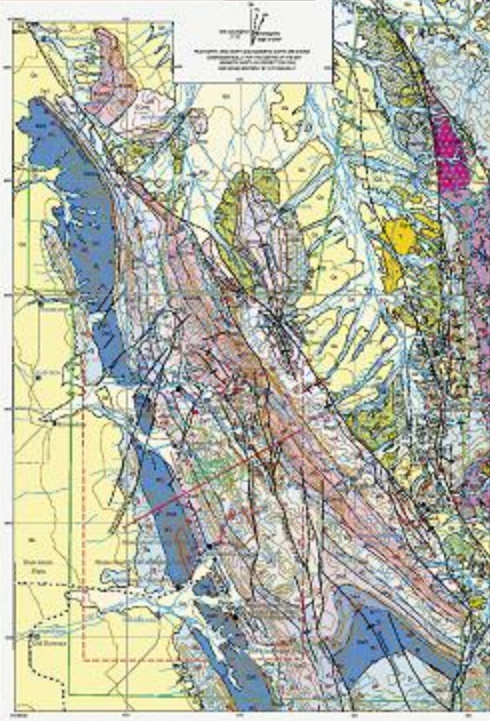
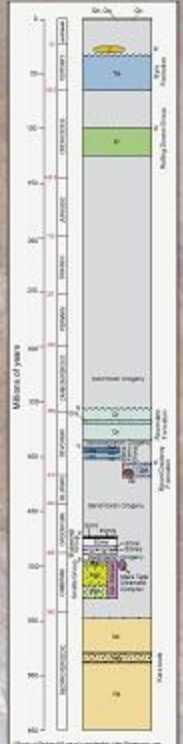
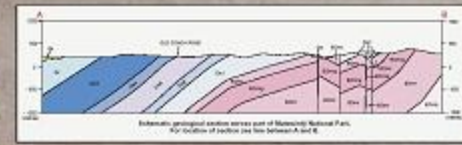


- excellent field-based leaders for tours
- experienced geologists preparing guides
- making use of high quality geological data provided by state and federal geological agencies
- geological maps, geophysical images, excursion guides, special interest brochures

Mutawintji brochure



TRAILS
THROUGH
TIME



GO4
GOVERNMENT OF NEW SOUTH WALES
DEPARTMENT OF MINERAL RESOURCES
2010-2011
Scale: 1:50,000

Geological Features

Geological Features	Map Symbols	Description
Geological Unit	Color fill	Indicates different geological units and their boundaries.
Geological Contact	Line with symbols	Indicates different types of geological contacts such as unconformities, faults, and suture zones.
Geological Structure	Line with symbols	Indicates geological structures like faults, folds, and suture zones.
Geological Feature	Symbol	Indicates specific geological features like caves, rock art, and fossiliferous sites.

Map Symbols

Symbol	Description
Color fill	Geological Unit
Line with symbols	Geological Contact
Line with symbols	Geological Structure
Symbol	Geological Feature

Geological Symbols

Symbol	Description
Line with symbols	Geological Contact
Line with symbols	Geological Structure
Symbol	Geological Feature

Topographic Symbols

Symbol	Description
Line with symbols	Topographic Contour
Symbol	Spot Height
Symbol	Watercourse
Symbol	Drainage
Symbol	Settlement
Symbol	Infrastructure



Geological Survey of New South Wales
Geological History of
MUTAWINTJI National Park
© New South Wales Government, 2010. Printed with
GO4 01/11 0001



Other Geological Survey NSW geotourism materials

MINING SITES IN NSW: HISTORY AND HERITAGE

... with guidelines for assessing heritage values and for taking actions on heritage mining places ...



Dr Michael Peckham & Dr Barry McGowan

NSW Industry & Investment



Industry & Investment

Conclusions

- need for continued contribution of geological materials aimed at geotourism by the GSNSW
- tour operators and other agencies e.g. National Parks Service, should make use of this information
- check that published information and signage is geologically up to date and correct
- geological tourism should be conducted by experienced geologists

Thank you



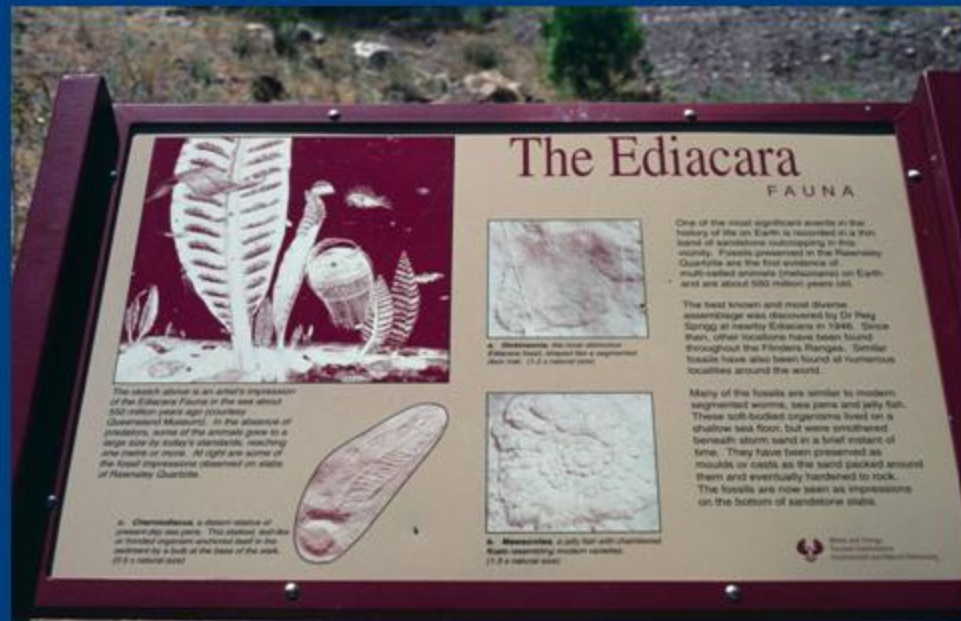
Sunset at Arkaroola

Geotourism



Promotion of geoscience to the wider community

- Guided geological tours
- Geotrails e.g. Brachina Gorge, Broken Hill
- Printed self-guided & web-based tours
- Significant geo sites e.g. Age of Fishes Museum
- National Parks & Geoparks



Guided Geological Tours



- Explaining processes that formed our Earth
- How landscapes formed
- Fill-in the earth sciences education “gap”
- Promote conservation of significant sites
- Understanding contribution of mining to past & present
- Links between geology & ecosystems
- Getting off-track

Where it all started

Earth

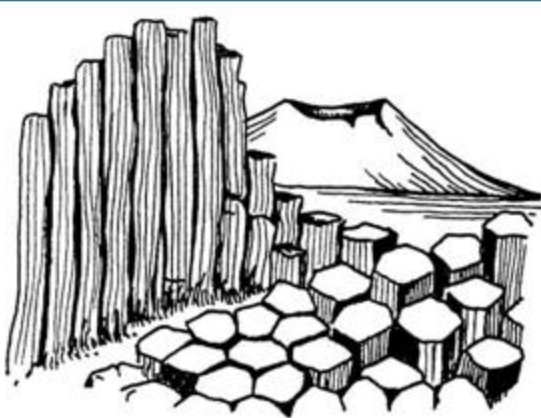
Discovery

Tours

1992-97



- Inspired by David Roots
- Aimed to promote geoscience
- Field-based
- Initially week-end activity
- Later view to business and career opportunity



Early Days

TOUR CALENDAR FOR 1996/97

April 20, 1996



HOT SPOTS TO ORGAN PIPES

Some of Melbourne's finest hinterland has resulted from past volcanic eruptions. The largest and most impressive occurred at Mt Macedon 350 million years ago. The more dramatic landforms preserved in this area, however, were produced during the last 6 million years by the eruptions that formed Camels Hump and Mt Diones (Hanging Rock). The tour concludes at the Organ Pipes where young basalt lava flows have cooled to form spectacular columnar and rosette patterns. One day (Saturday) from Melbourne, \$75.

May 4, 1996



VICTORIA'S DEEP FREEZE

A fascinating day in Victoria's Central Highlands, uncovering evidence for the largest period of glaciation to affect Victoria. Ice gradually crept northwards from Antarctica to cover Victoria 280 million years ago. Subsequent melting of the ice left piles of unusual rocks derived from Antarctica and subtle effects on the landscape that can still be detected today. This tour follows the path of the ice as it moved northwards. One day (Saturday) from Melbourne, \$75.

October 1-2, 1996



UNRAVELLING THE SPA COUNTRY

A two-day, mid-week tour that provides an overview of the diverse events that have shaped Victoria's Spa country. Mineral springs, fossils, volcanoes, ancient rivers, glaciers, gold and gemstones are related aspects of the diversity that can be seen in the Daylesford area. This tour is an excellent way of seeing first hand the techniques that scientists employ to interpret the processes that have operated on Earth in the recent and ancient geological past. Tour leaves Melbourne Tuesday morning, 1 night cottage or hotel accomm., \$235. Bookings for this tour close August 25.

October 5, 1996



GOLD PANNING & GEMSTONE PROSPECTING

A day in the country near Ballan, seeking gold, sapphires, spinel, zircon and ilmenite with a gold pan. We explain the many types of semi-precious stones and how minerals, such as gold, move in streams. You will also learn how to find minerals and what they tell us of the evolution of this area. An interesting pastime, enjoyed by the entire family, learned during a pleasant day. One day (Saturday) from Melbourne, \$75.

Earth Discovery Tours

Printed on recycled paper



- Short tours; 1-3 days
- Within short distance of Melbourne
- Theme-based tours



Industry &
Investment

Our Tour Leaders

- active field-based geologists
- usually mapped/researched geology of the visited area
- explained complex geology to lay people with minimal jargon



Our Geotourists

- invariably interested
- well educated
- widely travelled
- many retirees, empty nesters
- school teachers
- would-be geologists
- great rapport



Graptolite hunting, Trentham



Wallacedale tumuli

Longer Tours

1995, 1997: 15 days, Broken Hill, Olary, Mungo, White Cliffs

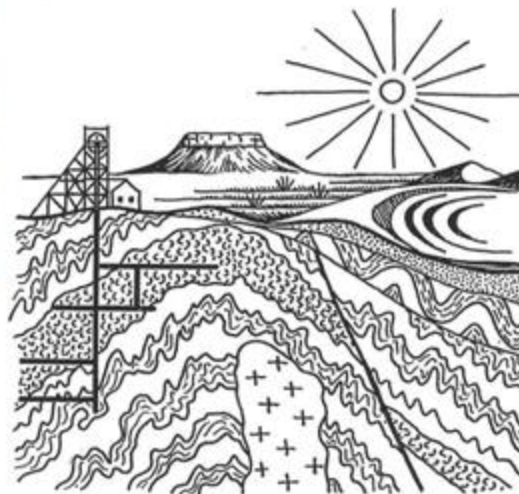


Sculptures, Broken Hill

Modern and Ancient Landscapes: a Geological Tour of Lake Mungo and Broken Hill

An 11 day tour organised by the School of Earth Sciences at the University of Melbourne

September 4-14, 1997



Tour notes written by Jim Bowler, Ian Plimer and Carol Simpson

Dissected lunette, Mungo



Longer Tours

1996, 1997: 9 days, Flinders Ranges

In the footsteps of Mawson: a geological tour of the Flinders Ranges

October 30 - November 7, 1996



Tour notes written by
Vic Gostin of the University of Adelaide,
Malcolm Wallace and Ian Plimer of the University
of Melbourne



Ridgetop drive, Arkaroola



Paralana hot springs