



**RECORD OF THE DEVELOPMENT OF GEOTOURISM
IN AUSTRALIA AS MANAGED BY THE GEOLOGICAL
SOCIETY OF AUSTRALIA (GSA)[#] OVER THE PERIOD
2011 TO 2019, AND THEN BY THE AUSTRALIAN
GEOSCIENCE COUNCIL INC (AGC) THROUGH TO THE
LAUNCH OF THE NATIONAL GEOTOURISM
STRATEGY IN APRIL 2021.**

**Angus M Robinson
Coordinator, Geotourism Australia
Australian Geoscience Council
19 February 2026**

[#] Information sourced from submitted reports to the Governing Council of the GSA and republished in their Annual Reports over the prescribed period.

2011 - 2012

Annual Report of the Geotourism Sub Committee to the Standing Committee for Geological Heritage of the Geological Society of Australia (GSA)

THE GEOTOURISM SUB COMMITTEE

In 2011, the Executive of the GSA approved the establishment of a new working group, the Geotourism Sub Committee, with the following composition.

- * Chair - Angus M Robinson, Managing Partner, Leisure Solutions®, Sydney
- * Jane Ambrose, Director, Natural Heritage North, Heritage & Wildlife Division, Department of Sustainability, Environment, Water, Population & Communities, Canberra
- * Nancy Vickery, University of New England, Armidale, NSW
- * Michael Comfort, Section Leader, Geodiversity Conservation and Management Section, Tasmanian Department of Primary Industries, Parks, Water and Environment, Hobart
- * Bob Conroy, Executive Director Park Management, Park and Wildlife Group, Office of Environment and Heritage, Department of Premier & Cabinet, Sydney
- * Dr Bruce Goleby, Chief Geophysicist and Group Leader Innovation and Specialist Services Group, Geoscience Australia, Canberra
- * Associate Professor E B Joyce, Earth Sciences School, The University of Melbourne, Melbourne
- * Professor Suzanne Miller, Director, South Australian Museum, Adelaide
- * Rick Murray, Managing Director, Middle Star Pty Ltd, Darwin
- * David Tucker, Principal, Responsible Resources Pty Ltd, Perth
- * Dr Susan Turner, Hon Research Fellow, Queensland Museum and Geological Consultant, Brisbane

Charter of the Geotourism Sub Committee (currently before the Executive of the GSA for approval)

“Recognising that geotourism, in addition to its role in promoting tourism to geosites, raises public awareness and appreciation of geodiversity, the Geotourism Sub Committee shall provide advice to the Standing Committee for Geological Heritage of the Geological Society of Australia (GSA) about advancing and promoting geotourism development in Australia.

In undertaking this role, the Geotourism Sub Committee shall take account of the requirement that geotourism should foster geoheritage conservation through appropriate sustainability measures and that geotourism activities should advance sound understanding of geoheritage including landforms, geology, and associated processes through quality interpretation. The Sub Committee shall also take account of indigenous cultural values in the interpretation of geosites subject of geotourism activity.

The Geotourism Sub Committee shall also provide advice to the Standing Committee about how best geotourism can be nurtured within declared National Landscape, World Heritage, and National Heritage areas as well as within National Parks and reserves.

In undertaking its mission, the Sub Committee shall review and recommend strategies that offer the potential for active participation of GSA members in geotourism and related interpretation activities.”

Note: It is recognised that some members of the Geotourism Sub Committee are able to provide advice about ‘geopark’ development in Australia. However given that the Sub Committee includes within its membership a number of government officials, and recognising that a 2009 resolution of Australian Government Ministers for the Environment has determined that existing mechanisms are considered sufficient to protect geoheritage in Australia, the issue of the future of geoparks has not been formally included within the Sub Committee’s charter.

Mission of the Geotourism Sub Committee

“To advise the Geological Society of Australia of how best geotourism can be advanced and nurtured having regard to the Society’s interests in promoting the understanding and conservation of the geoheritage of Australia.”

Meetings of the Geotourism Sub-Committee since inception

- Tuesday 8th November 2011
- Tuesday 7th February 2012

ACTIVITIES OF THE GEOTOURISM SUB COMMITTEE

34th International Geological Congress, Brisbane, August 2012

With Professor Ross Dowling of Edith Cowan University, the Sub Committee Chair is co-convening the Geotourism Symposium part of a major Geoheritage, Geoparks and Geotourism Symposia which is being convened by Sub Committee member, A/Professor Bernie Joyce. The Sub Committee decided that the Call for Papers for the Geotourism Symposium should embrace the following areas.

1. Understanding the full scope of geotourism within the broad context of ‘experiential’ tourism.
2. Management of geoheritage conservation and protection of areas delineated for geotourism.
3. Strategies and case studies embracing quality interpretation and communication of geoheritage in these areas.

4. Strategies and tools for analysing geodiversity in areas of geological significance.
5. Potential for developing geoparks in existing protected areas and within regions currently embraced by the Australian National Landscapes program.
6. The tangible benefits of geotourism would include, for example, building environmental awareness, providing direct financial benefits for conservation, providing financial benefits and empowerment for local people, respecting local culture etc.
7. Strategies for communicating to geologists (including from within the minerals industry) the 'tourism' element of 'geotourism.'
8. Best practice geotrails as a driver of geotourism activity.
9. Case studies of 'best practice' global geotourism development.
10. New ways (including using digital and social media) of marketing and promoting geotourism.
11. Strategies for repositioning popular natural heritage tourism sites such as cave systems/karst areas as geotourism exemplars.
12. Best Practice geotourism and education/interpretation.

Of some 70+ call for papers (including several posters) that have been assessed and approved so far, 21 of these have been assigned to the geotourism stream.

Engagement with the National Landscape Program

Australia's National Landscapes program is a partnership between tourism and conservation. The program's aims are to promote Australia's world-class, high-quality visitor experiences, enhance the value of tourism to regional economies, enhance the role of protected areas in those economies, and to build support for protecting Australia's natural and cultural heritage.

The National Landscapes program currently includes the following 13 'launched' regions: Australian Alps (New South Wales/Victoria), Australia's Green Cauldron (New South Wales/SE Queensland border region), Great Barrier Reef (Queensland), Australia's Red Centre and West Arnhem/Kakadu/Nitmiluk (Northern Territory), Australia's Coastal Wilderness (New South Wales/Victoria), the Flinders Ranges and Kangaroo Island (South Australia), the Great Ocean Road (Victoria), the Greater Blue Mountains (New South Wales), the Kimberley, Ningaloo-Shark Bay and South West Edge (Western Australia), Three other regions are also under active consideration and progressing towards launching viz. the island of Tasmania, Sydney Harbour, and the Wet Tropics area of North Queensland.

There is an opportunity for geological professionals, with a knowledge of the some 16 major areas currently designated as either launched or proposed National Landscapes, to provide expert advice and/or comment on the interpretation of landscape features and geosites and geoheritage issues generally, to discuss potential responsible geotourism opportunities, assist with appropriate geosite selection, to identify partnership opportunities, and to participate in collaborative geotourism related projects.

This opportunity may extend to direct involvement in the National Landscape Steering Committees, involvement in Experience Development Strategy (EDS) planning workshops, and comment on the EDS during the public consultation period and/or partnership opportunities.

At a recent meeting of Geotourism Sub Committee members in Canberra with the directors of the Australian National Landscape (ANL) program, the following actions were agreed.

1. The Geotourism Sub Committee to explore a pilot project focusing on the Flinders Ranges National Landscape and to explore the opportunity to access the Tourism TQUAL funding program to fund the pilot (and other like initiatives for landscape areas nationally).

<http://www.ret.gov.au/tourism/business/tq/tgrants/stig/Pages/default.aspx>

Mr Shaun de Bruyn, Manager – Experience Development, South Australian Tourism Commission has advised on 29th March that at this stage, there has been no decision so far on whether or not an application for TQUAL funding under the current round will be made.

It should be noted that Sub Committee member Professor Suzanne Miller is initiating parallel discussions with the SA Government about issues relating to the Flinders Ranges.

2. The ANL office to advise Geoscience Australia (through the offices of Sub Committee member Dr Bruce Goleby) of ANL priorities.
3. The ANL office to discuss with the ANL Reference Committee the offer by the GSA to nominate the Chair of the Geological Heritage Standing Committee (currently Dr Margaret Brocx) to be appointed as a new member of the Reference Committee.
4. The Geotourism Sub Committee to prepare a succinct information package (currently under preparation) outlining current availability of geoscience expertise available through the GSA network and relevant linkages for usage by the Steering Committees of each of the designated ANL areas.

In progressing these initiatives, it should be noted that the Geotourism Sub Committee also has links to the Geoscience Society and Heritage Committee of a kindred mining industry focused institute for professionals, The Australasian Institute of Mining & Metallurgy (The AusIMM).

It is recognised that linkages to geoscience expertise and knowledge can be publicised throughout the GSA and AusIMM (and other related geoscience bodies) through their established communication channels and their regular meetings, seminars, and conferences.

Apart from contact being made with the Flinders Ranges National Landscape, the Sub Committee has also been engaging (with the kind assistance of the Standing Committee Chair) with the South West Edge National Landscape.

In addition, an opportunity exists for the GSA Standing Committee Qld branch and the GSA Geotourism Sub Committee to contribute to the draft strategy for the Green Cauldron National Landscape **by 30th April 2012**.

Addressing the Issue of the Definition of Geotourism

Because there is strong consensus to the view that geology and landscapes underpin all ‘places’, the Geotourism Sub Committee is currently seeking the support of the National Geographic Society (USA) to amend its global definition to make specific reference to scenic landscapes and geology so as to achieve a headline definition under which a wider range of stakeholders could engage i.e.

“Geotourism is Tourism that sustains or enhances the geographical character of a place, its environment, its scenic landscapes, geology, culture, aesthetics, heritage, and the well-being of its residents”

The Sub Committee has also decided that it should develop its own ‘customised’ definition which would embrace more fully the relationship of geoheritage and geotourism in a way that can be fully supported and endorsed by the Geological Society of Australia, consistent with its charter and mission.

New Geomap Project in NSW

Cartoscope Pty Ltd, a NSW tourism publication company with links to the mining and exploration industry, has been successful in receiving a TQUAL Grant under the Tourism Quality Projects program. This grant from the Department of Resources, Energy and Tourism supports innovative, sustainable, and high-quality tourism projects. TQUAL Grants is an Australian Government funded initiative. The ultimate aim is to get more visitors into regions to contribute to the economic development of regional areas.

The Cartoscope project is to produce a Geo-tourism map of NSW with an accompanying website www.geomaps.com.au

The map will be free to the public and will mark the location of around 80 plus interesting geological sites, as well as a short description of each. The website will provide more detailed information which can be printed at home and referred to in the field.

This product will attract many people to visit more off-the-beaten-track destinations which often have no other attraction to attract visitors. It will enhance people's understanding of earth sciences and develop an interest in that field as a career option especially in senior school students. It is expected that many education facilities will take advantage of this product to provide a resource for their teaching and excursions with the double benefit of bringing the economic benefits to the selected destination.

Existing Geological Tour operators like the Age of Fishes Museum and the Ulladulla Fossil Walk are very excited about this project and the opportunity it presents to make their assets known to the public. Cartoscope has engaged leading geological consultants McElroy Bryan Geological Services to provide the geological content. Cartoscope is producing this project on a philanthropic basis and is currently seeking sponsorship which could be offered by associations, mining and exploration companies or education institutions to help the company offset production costs.

The Geotourism Sub Committee has offered to provide input and to assist in identifying interested industry sponsors for this project. **There is an opportunity for the NSW Division to consider contributing some funding to this project.**

Angus M Robinson

Chair, Geotourism Sub Committee

29th March 2012

2012- 2013

2012/2013 Annual Report of the Geotourism Sub Committee to the Standing Committee for Geological Heritage of the Geological Society of Australia (GSA)

THE GEOTOURISM SUB COMMITTEE

- * Chair - Angus M Robinson, Managing Partner, Leisure Solutions®, Sydney
- * Michael Comfort, Section Leader, Geodiversity Conservation and Management Section, Tasmanian Department of Primary Industries, Parks, Water and Environment, Hobart
- * Bob Conroy, Director Conservation Programs Division, Office of Environment and Heritage, Department of Premier & Cabinet, Sydney
- * Professor Ross Dowling #, Foundation Professor and Head of Tourism, School of Marketing, Tourism & Leisure, Perth
- * Dr Bruce Goleby, Chief Geophysicist and Group Leader Innovation and Specialist Services Group, Geoscience Australia, Canberra

- * Associate Professor E B Joyce, Earth Sciences School, The University of Melbourne, Melbourne
- * Bruce Leaver #, Chairman, Sapphire Coast Tourism, Cobargo, NSW
- * Ian D Lewis #, Director, Kanawinka Geopark, Adelaide
- * Professor Suzanne Miller, Director and CEO, Queensland Museum, Brisbane (effective July 2013)
- * Rick Murray, Managing Director, Middle Star Pty Ltd, Darwin
- * Ian Neuss#, Councillor, Australian Institute of Geoscientists, Sydney
- * David Tucker, Principal, Responsible Resources Pty Ltd, Perth
- * Dr Nancy Vickery *, University of New England
- * Dr Neil Williams, Convenor, Proposed Sub Committee Geoparks Reference Panel, Canberra

Ex-Officio:

- * Margaret Brocx, National Convenor, GSA Standing Committee for Geological Heritage

Correspondents:

- * Jane Ambrose *, Director, Natural Heritage North, Heritage & Wildlife Division, Department of Sustainability, Environment, Water, Population & Communities, Canberra
 - * Dr Susan Turner *, Hon Research Fellow, Ancient Environments, Queensland Museum and Geological Consultant, Brisbane
 - * Patrick McKeever, Chief of the Earth Science Section, UNESCO
- # New appointments made during the year, * Retirements accepted

ACHIEVEMENTS OF THE GEOTOURISM SUB COMMITTEE DURING 2012/2013

1. Geoheritage, Geoparks and Geotourism Symposium of the 34th IGC, August 2012

Under the convenorship of Associate Professor Bernie Joyce, Symposia 1.1 on Geoheritage, Geoparks and Geotourism had a strong presence from Europe of ProGEO members. There were also presentations from many other countries. Sessions ran over three full days, making this the biggest international geoheritage gathering in Australia, and the first gathering of geotourism enthusiasts under a GSA banner.

Local presentations included the history of work in Australia by the GSA, by state governments in Tasmania and NSW, and the Australian government through World and National Heritage listings. Other local topics included fossil heritage, desert landscapes, the Pilbara region of WA, Wolfe Creek Meteorite Crater, and the Kanawinka volcanic geopark of southeastern Australia and exploring new pathways for geopark development in Australia. Many overseas presenters also took part in the Symposia. Following two days about Geoheritage, the third was devoted to Geoparks and Geotourism, again with both local and overseas presenters, the latter co-convened by Professor Ross Dowling and the GSC Chair.

The Chair of the GSC provided support to a special geoheritage workshop associated with the Symposia.

2. Engagement with the Australian National Landscapes Program

Following extensive representations to Parks Australia, on 12th July 2012, the GSC was advised that a detailed process for provision of advice/liaison between the GSA and the 16 National Landscapes Steering Committee had been approved.

The GSC was provided with the opportunity to contribute to the Experience Development Strategy for the *Australia's Green Cauldron* National Landscape (SE Qld/NSW) in late 2012 and a specific strategy for GSA engagement has been included in the strategy documentation. The GSC's Chair has also been appointed to the Landscape's Reference Committee to represent the GSA.

Other GSC members are directly involved in the National Landscapes Program. Professor Ross Dowling has also been appointed as the Chair of the Steering Committee for the Great South West Edge National Landscape in WA, Rick Murray is Deputy Chair of the Steering Committee for Australia's Timeless North Landscape in the NT, and Bruce Leaver plays a key role in the tourism management of Australia's Coastal Wilderness Landscape in NSW/Victoria.

The GSC has also facilitated preliminary overtures from interested Global Geopark managers in China to the NSW National Parks and Wildlife Group aimed at developing bi-lateral collaboration arrangements between China and Australia's National Landscapes regions.

3. Provision of Geological Information in National Parks

Since 2010, the GSC has supported efforts by the Linnean Society of NSW to convene scientific symposia (e.g., Port Macquarie meeting focused on geoheritage and geotourism and the recent Jenolan Caves meeting) where representatives of the National Parks and Wildlife Group and the NSW Geological Survey (GSNSW) can discuss areas of mutual interest.

In addition, with the encouragement of GSC member, Bob Conroy (Director Conservation Programs Division, NSW Office of Environment and Heritage, Department of Premier & Cabinet), and preliminary discussions with the GSNW, a meeting between both government agencies has been arranged for 1 August 2013 to discuss the mechanisms for populating NSW National Parks web site listings with geological content supplied by the GSNSW.

It is hoped that this major step forward would provide a model for similar arrangements to be enacted by other state and territory jurisdictions. It is recognised that open access to geological data and information will provide considerable benefits to a wide range of users including geotourism operators.

It is also worth noting that the GSC has initiated discussions with the GSNSW to explore options for proposed geotourism field excursions associated with the AESC 2014 in Newcastle, an activity which could also involve the National Parks and Wildlife Group.

4. GeoTreat Smartphone Proof of Concept Project

Recently a 'proof of concept' project promoting geoscience awareness on the Sapphire Coast of NSW has been launched. GeoTreat, a smartphone-based application, brings to life some 19 geosites forming part of a key 'geojourney' along a section of the coastline south of Narooma and extending into Victoria (a national landscape region known as 'Australia's Coastal Wilderness'). The geojourney is a geoscience awareness program developed by geologist Dr Anne Felton and Bruce Leaver, the Chairman of the Sapphire Coast Tourism Board, and a member of the GSC.

The GeoTreat technology being applied is a joint project of four Nordic countries - Sweden, Norway, Denmark, and Finland, directed by the Geological Survey of Sweden and now involving the Geotourism Sub Committee as a collaborating partner. This collaboration was conceived as a follow up to a presentation by a representative of the Geological Survey of Sweden at the Geotourism Symposium of the 34th IGC held in Brisbane last year. These Australian geosites (which include the Montreal Goldfield heritage site near Bermagui, NSW) now feature along with the Scandinavian geosite cluster on the GeoTreat world map. Should this innovative 'proof of concept' prove successful for Australia, it is intended to initially expand the scope of the projects to embrace two or three other Australian National Landscape regions; for example, the Flinders Ranges in South Australia is ideally suited for this application.

5. NSW Geotourism Map

Cartoscope Pty Ltd, a NSW tourism publication company with links to the mining and exploration industry, has been successful in receiving a TQUAL Grant under the Tourism Quality Projects program. This grant from the Department of Resources, Energy and Tourism supports innovative, sustainable, and high-quality tourism projects. TQUAL Grants is an Australian Government funded initiative. The ultimate aim is to get more visitors into regions to contribute to the economic development of regional areas.

Cartoscope has recently launched the NSW Geotourism Map (with a print run of 100,000 copies) which shows a range of 96 sites in NSW which are significant geological sites, museums, or tours. There are short descriptions of geology with map references and location flags on the map so the sites can be easily found. The map has a partner website www.geomaps.com.au which gives detailed descriptions, photos, maps, and itineraries.

Whilst the geological identification and descriptive work was undertaken by GSA member, John Bryan of McElroy Bryan Geological Services, the GSC has provided extensive assistance in identifying and securing sponsors for this project, for which the GSA has been acknowledged on the map as a sponsor. The Chair of the GSC, assisted by Dr David Branagan, has also provided promotional support, having undertaken three interviews on ABC statewide radio.

It should be noted that both public and schoolteacher responses to the geotourism map and the media publicity have been very positive and have well exceeded expectations.

6. Collaborative Minerals Heritage Project with The AusIMM

The GSC has agreed to collaborate in an AusIMM Heritage Committee project focusing on detailed information (including geological content) for three pilot mining heritage regional sites in Australasia - the Illawarra Coalfields, Mt Isa, and a New Zealand site (to be nominated). Mining heritage sites are increasingly being recognised as focal points for geotourism activity.

7. Definition of Geotourism

Because there is strong consensus to the view that geology and landscapes underpin all ‘places’, the GSC has been seeking the support of the National Geographic Society (USA) to amend its global definition to make specific reference to scenic landscapes and geology so as to achieve a headline definition under which a wider range of stakeholders could engage i.e. “Geotourism is tourism that sustains or enhances the geographical character of a place, its environment, its landscapes, geology, culture, aesthetics, heritage, and the well-being of its residents”

The GSC has also decided that it should develop its own ‘customised’ definition which would embrace more fully the relationship of geoheritage and geotourism in a way that can be fully supported and endorsed by the GSA consistent with its charter and mission. It has been decided that the GSA definition will be based on the following principles i.e.

- Is geologically based and can occur in either natural, rural or urban environments.
- Fosters geoheritage conservation through appropriate sustainability measures.
- Advances sound geological understanding through interpretation and education.
- Generates tourist interest, entertainment and satisfaction.
- Is beneficial locally.

It is planned to finalise a GSA definition over the next few months.

8. IUCN World Parks Congress 2014

The GSC has provided input for the submission made to the IUCN by ProGEO and the Convenor of the Standing Committee for Geological Heritage. As a member of the Australian Organising Committee of the Parks Congress, GSC member Bob Conroy was also able to provide valuable internal support and the GSC Chair obtained a letter of support from the Chair of The AusIMM Heritage Committee.

Angus M Robinson

Chair, Geotourism Sub Committee of the Standing Committee for Geological Heritage.

28th June 2013

2013- 2014

2013/2014 Annual Report of the Geotourism Sub Committee to the Standing Committee for Geological Heritage of the Geological Society of Australia (GSA)

THE GEOTOURISM SUB COMMITTEE

- * Chair - Angus M Robinson, Managing Partner, Leisure Solutions®, Sydney
- * Michael Comfort, Section Leader, Geodiversity Conservation and Management Section, Tasmanian Department of Primary Industries, Parks, Water and Environment, Hobart
- * Bob Conroy, Director ARRDENT Pty Ltd, Sydney
- * Professor Ross Dowling OAM, Foundation Professor of Tourism and Associate Head, School of Business, Edith Cowan University, Perth
- * Dr Bruce Goleby, Chief Geophysicist and Group Leader Innovation and Specialist Services Group, Geoscience Australia, Canberra
- * Associate Professor E B Joyce, Earth Sciences School, The University of Melbourne, Melbourne
- * Bruce Leaver, Chairman, Sapphire Coast Tourism, Cobargo, NSW
- * Ian D Lewis, Director, Kanawinka Geopark, Adelaide
- * Professor Suzanne Miller, Director and CEO, Queensland Museum, Brisbane (effective July 2013)
- * Rick Murray#, Managing Director, Middle Star Pty Ltd, Darwin
- * David Tucker, Principal, Responsible Resources Pty Ltd, Perth
- * Dr Neil Williams, Convenor, GSC Parks Reference Panel, Canberra

Ex-Officio:

- * Margaret Brocx, National Convenor, GSA Standing Committee for Geological Heritage

Observers:

- * Ian Neuss, Councillor, Australian Institute of Geoscientists, Sydney

Correspondents:

- * Jane Ambrose, Director, Natural Heritage North, Heritage & Wildlife Division, Department of Sustainability, Environment, Water, Population & Communities, Canberra
 - * Dr Susan Turner, Hon Research Fellow, Ancient Environments, Queensland Museum and Geological Consultant, Brisbane
 - * Patrick McKeever, Chief of the Earth Science Section, UNESCO
- # Retirement accepted

ACHIEVEMENTS OF THE GEOTOURISM SUB COMMITTEE DURING 2013/2014

1. Engagement with the Australian National Landscapes Program

The Geotourism Sub Committee (GSC) has continued to contribute to the Experience Development Strategy (EDS) for the *Australia's Green Cauldron* National Landscape (SE

Record of Geotourism Development in Australia Prior to the Launch of the National Geotourism Strategy

Qld/NSW) in late 2012 and a specific strategy for GSA engagement has been included in the strategy documentation. The GSC's Chair has also been appointed to the Landscape's Reference Committee to represent the GSA and has attended two meetings during the year.

The GSC has also formulated and made a submission to the EDS for the *Sydney Harbour* National Landscape. The final EDS document was launched at an event in Sydney on 31 March 2014 at which the GSC was represented.

Other GSC members are directly involved in the National Landscapes Program. Professor Ross Dowling is the Chair of the Steering Committee for the *Great South West Edge* National Landscape in WA, Rick Murray has been Deputy Chair of the Steering Committee for *Australia's Timeless North* Landscape in the NT, and Bruce Leaver plays a key role in the tourism management of *Australia's Coastal Wilderness* Landscape in NSW/Victoria.

Preliminary and very positive discussions have recently been undertaken with Tourism Tasmania in regard to the GSC providing geological information for the *Island of Tasmania* National Landscape following the release of the Cradle Coast Geotrail proposal <http://www.cradlecoast.com/literature/Cradle%20Coast%20GeoTrail%20FINAL.pdf>

In association with the newly established Geotourism Forum of Ecotourism Australia Ltd, the GSC has also continued to facilitate preliminary overtures from interested Global Geopark managers in China aimed at developing bi-lateral collaboration arrangements between China and Australia's National Landscapes regions. In this context, the GSC Chair attended a Geotourism Conference in Hong Kong on 30th November 2013 organised by the Hong Kong Geopark.

In respect to the issue of Geoparks, the GSC Chair has met twice with Dr Neil Williams in Canberra to discuss proposed administrative arrangements for the proposed Parks Reference Panel.

2. Provision of Geological Information in National Parks

Since 2010, the GSC has supported efforts by the Linnean Society of NSW to convene scientific symposia (e.g., Port Macquarie meeting focused on geoheritage and geotourism and the 2013 Jenolan Caves meeting) where representatives of the National Parks and Wildlife Group and the NSW Geological Survey (GSNSW) can discuss areas of mutual interest.

In addition, with the encouragement of GSC member, Bob Conroy (then Director Conservation Programs Division, NSW Office of Environment and Heritage, Department of Premier & Cabinet), and preliminary discussions with the GSNW, a meeting between both government agencies was arranged in 2013 to discuss the mechanisms for populating NSW National Parks web site listings

with geological content supplied by the GSNSW. Since then, the GSC has continued to encourage this engagement to develop.

During the past year, Susanne Miller has met recently with GSA President, Laurie Hutton to discuss Queensland Geological Survey (QSG)/GSA involvement in geotourism activities in Queensland. The Queensland Museum is in active discussions regarding making QSG geological information with relevance to geotourism available to the public. In addition, the Queensland Museum is now developing a geotourism app for Queensland. This will be initially populated with palaeontological site, and to be funded through a corporate sponsorship. Discussions have also begun about potential content contributions from the QGS.

The GSC Chair has been provided with the opportunity to meet with a policy officer of the Minister for Environment at a meeting in Canberra in December 2013 and a further meeting in February 2014 with Parliamentary Secretary Senator (South Australia) the Hon Simon Birmingham who has portfolio responsibility for national parks.

3. GeoTreat Smartphone Proof of Concept Project

In 2013 a 'proof of concept' project promoting geoscience awareness on the Sapphire Coast of NSW was launched. GeoTreat, a smartphone-based application, brings to life some 19 geosites forming part of a key 'geojourney' along a section of the coastline south of Narooma and extending into Victoria (a national landscape region known as *Australia's Coastal Wilderness*). The geojourney is a geoscience awareness program developed by geologist Dr Anne Felton and Bruce Leaver, the Chairman of the Sapphire Coast Tourism Board, and a member of the GSC. During the past year, additional activity has been undertaken with the view of extending this network into Victoria.

The GeoTreat technology being applied is a joint project of four Nordic countries - Sweden, Norway, Denmark, and Finland, directed by the Geological Survey of Sweden and now involving the GSC as a collaborating partner.

In September 2013, Bruce Leaver was provided with the opportunity to address the national annual meeting of the National Landscapes managers and to explain the Geotreat project. Strong interest was expressed by the managers of the *Australia's Green Cauldron* and *Kangaroo Island* National Landscapes.

In March 2014, Bruce Leaver was also provided with the opportunity to brief a workshop of the *Australia's Green Cauldron* National Landscape about a GeoTreat implementation program based on research work he had undertaken of the geology and landscapes of this region. It is understood that the Steering Committee for this national landscape is keen to proceed with an implementation project.

4. Collaborative Minerals Heritage Project with The AusIMM

The GSC is continuing to collaborate in an AusIMM Heritage Committee project focussing on detailed information (including geological content) for three pilot mining heritage regional sites

in Australasia - the Illawarra Coalfields, Mt Isa, and a New Zealand site (to be nominated). Mining heritage sites are increasingly being recognised as focal points for geotourism activity.

5. Definition of Geotourism

In considering definitional issues for endorsement and adoption by the GSA, it needs to be understood that geotourism comprises a number of interrelated components all of which should be present for authentic geotourism to occur. There are three key principles which are fundamental to geotourism. They are that geotourism is geologically based (that is, based on the earth's geoheritage); sustainable (i.e., economically viable, community enhancing and fosters geoconservation); and educative (achieved through geo-interpretation). All three characteristics are considered to be essential for a product to be considered an exemplary of geotourism.

At its meeting of 12th November 2013, the GSC considered the background information that had been carefully developed by Professor Ross Dowling in reviewing existing definitions of geotourism, and it was agreed following input from members that a first draft of a proposed new definition was succinct but could be improved with some recognition of the value of geotourism as experiential tourism which addressed the needs of the travelling public. A small working group was established to assess these identified needs.

At its meeting of 4th February 2014, the GSC discussed the recommendations of the working group, which included reference to the key concepts of 'visitor engagement, learning and enjoyment.'

In late February, the GSC subsequently recommended to the Standing Committee for Geological Heritage that it endorse the Sub Committee's carefully considered recommendation for a proposed definition of geotourism, inter alia, '**Geotourism is sustainable tourism which focuses on an area's geology and landscape as the basis for providing visitor engagement, learning and enjoyment**', for adoption by the GSA, in order that it can be submitted for approval by the Executive Committee of the GSA at its next meeting.

6. IUCN World Parks Congress 2014, Sydney

The GSC has recently made the following submission to the IUCN to enable discussion of geotourism at its November event.

"Geotourism is emerging as a new global phenomenon which fosters sustainable tourism based upon landscapes. Its definition has recently been refined as a form of tourism that specifically focuses on the geology and landscapes which shape the character of a region. Geotourism promotes tourism to "geo-sites" and the conservation of geodiversity and an understanding of earth sciences through appreciation and learning. Thus, geotourism is sustainable tourism which focuses on an area's geology and landscape as the basis for providing visitor engagement, learning, and enjoyment.

Essential to the development of geotourism is the understanding of the identity or character of a region or territory. To achieve this, geotourism is viewed as being based on the idea that the environment is made up of Abiotic, Biotic and Cultural components. This 'ABC' approach comprises the Abiotic elements of geology and climate, the Biotic elements of animals (fauna) and plants (flora), and Cultural or human components. Geotourism argues that to fully understand and appreciate the environment, we must know about the Abiotic elements of geology and climate first as these determine the Biotic elements of animals and plants which live there. By extension, the combination of the Abiotic and Biotic components of the environment determines the Cultural Landscape of how people lived in the area in the past, as well as how they live there today.

However, as is the case for much of the world's protected natural areas, there is very limited interpretative information available about the Abiotic components of the environment, because in many countries, geotourism is more often than not perceived as a mainstream professional pursuit for people trained in earth sciences.

As geotourism continues to develop globally, it offers the potential to create opportunities for geoscientist employment both within government land management agencies and within the tourism industry generally.

Engaging earth scientists to participate in geotourism will enhance dramatically the quality and scope of environmental interpretation and inspire a new generation of park users, seeking an enhanced, holistic, educative experience."

It is anticipated that the GSC will receive advice about acceptance of this proposal by the end of May.

7. AESC 2014

The GSC has collaborated with the Earth Sciences History Group to put together a one-day symposium on geotourism at AESC 2014 which includes two keynotes, 10 presentations and a panel session which focuses on the theme 'Geotourism - The Potential for Employment Opportunities for Geoscientists'.

The two GSA groups also collaborated to put together a two-day pre-conference tour to the Blue Mountains World Heritage Area (including Jenolan Caves) but unfortunately this project has been cancelled because of insufficient bookings. The assistance of Dr Ian Percival, Dr John Pickett, and Dr David Branagan as members of the organising group is acknowledged with much appreciation.

8. Submission to the GSA Executive Committee in Support of the Establishment of a Separate Standing Committee for Geotourism

On 31 July 2013, at the invitation of the GSA Executive Committee, the GSC lodged a submission based on seeking a separate Standing Committee for Geotourism because the roles of geoheritage (an over- arching 'horizontal' responsibility) and geotourism (a vertical 'industry silo'), whilst having similarities, are quite different.

It was argued that geoheritage fosters an understanding of geological attributes through research and education. On the other hand, geotourism utilises appropriate geological resources to foster sustainable development opportunities through tourism. Such development is predicated on the notion that not all places are able to be, or should be, developed for tourism, but where this does occur, that such development fosters conservation, community, education, and economic benefits in a sustainable manner.

Given the relatively short time that the GSC has been established, it was pointed out that much has been achieved already, and it is quite evident that many of the initiatives will expand in scope beyond the remit and capacity of the resources available to the Standing Committee for Geological Heritage.

It was also submitted that all members of a proposed Standing Committee for Geotourism should be full members of the GSA, and those few existing GSC members who, through lack of a geoscience qualification, can only be affiliated as Associate members could engage in an advisory, but not in a voting capacity.

In conclusion, it was argued that the establishment of a separate Standing Committee for Geotourism should be seen as recognition of a significant emerging activity that should involve professional geoscientists in a field of endeavour that has been largely occupied in the past and promoted by persons and organisations unskilled in the practice of geoscience. Working closely with the Standing Committee for Geological Heritage, it was also clearly stated that a proposed Standing Committee for Geotourism could serve to maximise the Society's interests in promoting the understanding and conservation of the geoheritage of Australia.

In later discussions with the GSA Executive Director, it was agreed that an alternative governance arrangement of geotourism being managed through a specialist group rather than through a standing committee was explored, as it might prove a better arrangement.

However, early in 2014, the GSA President advised that any decision to establish a separate governance arrangement had been deferred for consideration for the next Executive Committee and that existing arrangements would continue for the time being. He also requested that the GSC made every effort to ensure that its members became members of the GSA as Office Bearers, it is a Constitutional requirement. In this regard, at year's end, all prior non-GSA members of the GSC had agreed to join the GSA, with one member (representing the AIG) being affiliated with the GSC as an approved 'Observer.'

Angus M Robinson

Chair, Geotourism Sub Committee of the Standing Committee for Geological Heritage.

14th May 2014

2014-2015

2014/2015 Annual Report of the Geotourism Standing Committee of the Geological Society of Australia (GSA)

THE GEOTOURISM STANDING COMMITTEE

- * Chair - Angus M Robinson, Managing Partner, Leisure Solutions®, Sydney
- * Michael Comfort, Section Leader, Geoconservation Section, Tasmanian Department of Primary Industries, Parks, Water and Environment, Hobart
- * Bob Conroy, Administrator, Jenolan Caves Trust, Sydney
- * Professor Ross Dowling OAM, Foundation Professor of Tourism and Associate Head, School of Business, Edith Cowan University, Perth
- * Vicki Pow, Canberra
- * Associate Professor E B Joyce, Earth Sciences School, The University of Melbourne, Melbourne
- * Bruce Leaver, Chairman, Sapphire Coast Tourism, Cobargo, NSW
- * Ian D Lewis, Director, Kanawinka Geopark, Adelaide
- * Professor Suzanne Miller, Director and CEO, Queensland Museum, Brisbane
- * Young Ng, Founder and Chair of the Hong Kong Association for Geoconservation, Sydney
- * David Robson, Associate, Leisure Solutions®, Sydney
- * David Tucker, Principal, Western River Pty Ltd, Perth
- * Neil Williams, University of Wollongong, Canberra

Observer:

- * Ian Neuss, Councillor, Australian Institute of Geoscientists, Sydney

Correspondents:

- * Veronica Blazely, Director, Natural Heritage Section, Department Environment, Canberra
- * Patrick McKeever, Chief of the Earth Science Section, UNESCO.

ESTABLISHMENT OF THE GEOTOURISM STANDING COMMITTEE

Following a decision of the GSA Governing Council, on the 18th of November 2014, the Geotourism Sub Committee was replaced with a Geotourism Standing Committee. Members of the former Sub Committee have automatically become members of the new Standing Committee, with its Terms of Reference, to be reviewed and approved by the Governing Council.

The effect of this decision is that the pursuit of geotourism in Australia is now being formally supported nationally by both the Geological Society of Australia and the peak national nature-based tourism industry association - Ecotourism Australia Ltd (EA).

It is recognised that the decision by the Governing Council represents a strong vote in support of geotourism and augers very well for the future development in Australia of this rapidly growing, global industry sector.

It is also worth noting that The AusIMM, in its June 2014 submission to the draft Australian Heritage Strategy of the Australian Government has also provided strong support for the concept of geotourism.

Given the interest that is now being generated in the geoscience professions about the potential of geotourism, discussions have been initiated with The AusIMM Geoscience Society and the Australian Institute of Geoscientists (AIG) about their representation on the Geotourism Standing Committee by societal representatives who are also members of the GSA. Already Geoff Sharrock, Immediate Past President of The AusIMM, has indicated that he would join the GSA to represent The AusIMM on the Standing Committee if invited, and it is hoped that the AIG will be in the position to emulate this move.

Discussions have also been held with GSA President Graham Carr to determine whether the Australian Geoscience Council would be prepared to include geotourism as an area of future project funding and support.

ACHIEVEMENTS OF THE GEOTOURISM SUB COMMITTEE AND STANDING COMMITTEE DURING 2014/2015

1. Engagement with the Australian National Landscapes Programme, National Parks and Chinese Global Geoparks

Engagement with the Australian National Landscape Programme has continued. In his capacity as a member of the Australia's Green Cauldron Landscape's Reference Committee, the then Geotourism Sub Committee Chair attended the Annual Forum of the Programme held in the Flinders Ranges in August.

Subsequently, as part of the 'Seeing the Results' phase of the Programme, Parks Australia (and Tourism Australia) have announced that they have stepped back from a central coordination role, and instead have offered limited funding to EA to enable it to administer the programme and co-ordinate the development of a transition plan for the programme to become financially sustainable. EA has currently sought commitments from most of the national landscapes so as to secure the Tourism Australia matching funding.

With EA now assuming a coordinating role, it is envisaged that as geotourism continues to develop both globally and within Australia, it is believed that more opportunities for geoscientist employment within government land management agencies, areas embraced by the national landscapes, and within the tourism industry will be created.

Other Standing Committee members are directly involved in the National Landscapes Program. Professor Ross Dowling is the Chair of the Steering Committee for the *Great Southwest Edge* National Landscape in WA and Bruce Leaver plays a key role in the tourism management of *Australia's Coastal Wilderness* Landscape in NSW/Victoria.

In association with the newly established Geotourism Forum of EA, the Standing Committee has also continued to facilitate preliminary overtures from interested Global Geopark managers in China aimed at developing bi-lateral collaboration arrangements between China and Australia's National Landscapes regions.

In recent months, efforts have been directed at identifying a suitable geoscience-focused professional grouping which could be encouraged to develop a broader co-operation arrangement with geotourism interests in Australia i.e. the Geotourism Standing Committee of the GSA and the Geotourism Forum of EA, on the basis that such an agreement might well be endorsed by the respective national governments.

At this stage, it is proposed that any co-operation agreement could embrace areas of activity which could include

- growing and enhancing the level of best practice 'nature-based' tourism in both China and Australia;
- progressing protection, conservation and presentation of the geoheritage of natural and mixed protected areas, Geoparks (in China), national parks and reserves (in Australia), Australian National Landscapes and areas on the World Heritage List (as defined in the World Heritage Convention 1972) areas (both countries);
- exploring opportunities to promote ecotourism and geotourism;
- raising the profile of China and Australia as world- leading 'nature-based' tourism destinations;
- exploring other co-operative projects such as participation in conferences; and
- fostering the development of 'sister park' relationships between China and Australia.

Dr Young Ng, a member of the Standing Committee and Founder and Chair of the Hong Kong Association for Geoconservation, has determined that the Geological Society of China (GSC) is

the only 'NGO' in China that could fulfil the role as a China partner, and at its March meeting, the GSA Governing Council approved of Dr young making a formal approach to the GSC to initiate discussions about the feasibility of a co-operation agreement being formulated, with EA being incorporated as a collaborating partner.

Following an initial meeting between officials of the NSW Office of Environment and Heritage, and the NSW Geological Survey of NSW (GSNW) in August 2013 to discuss the mechanisms for populating NSW National Parks web site listings with geological content supplied by the GSNSW, the Geotourism Standing Committee has decided to re-open these discussions in NSW, and with the assistance of Dr Neil Williams, to seek to have this proposal discussed by the Government Geologists Committee as a potential nation-wide initiative.

In September 2014, a meeting, also involving EA was held with the Minister for Environment, the Hon Greg Hunt MP, to discuss matters relating to the future of Australia's National Landscape Programme, the potential for an Australia-China collaboration, and geopark development, the latter issue being followed up by EA.

2. GeoTreat Smartphone Proof of Concept Project

Following the 34th IGC at which the Swedish Geological Survey (SGS) presented the GeoTreat application to delegates and called for other countries to be engaged in an 'open source' collaboration with the Scandanavian Geological Surveys, the then Geotourism Sub Committee contacted the SGS and indicated that Australia would be interested. Arrangements were then made for the NSW Sapphire Coast Tourism RTO Chairman, Bruce Leaver to contact the SGS directly and to organise at the cost of the RTO the loading of geological information forming part of their Geojourney program <http://www.sapphirecoast.com.au/blog/take-a-sapphire-coast-geo-tour-with-our-new-app/> as the first pilot for Australia. Subsequently, Bruce Leaver travelled to a workshop in Sweden and then addressed the Annual Forum of the Australian National Landscape Program in 2013 http://www.tourism.australia.com/documents/Campaigns/Case_Study_Geotreat_Tool.pdf at which time steering committee interests from Australia's Green Cauldron, Kangaroo Island and Flinders Ranges have subsequently expressed interest in trialling this application.

During the past 12 months, the then Geotourism Sub Committee has sought agreement from the SGS that heritage coalfield sites in the Illawarra region could also be trialed and indicated that should this pilot be offered, SGS could deal directly with the Illawarra Branch of The AusIMM. Being an open-source project, there are no licensing arrangements required, and so far, SGS has generously hosted the geological data on their servers. The costs of participation are minimal and relate to the collation of photos and text and GPS data that is formatted for use in the Application.

3. Definition of Geotourism

At its January 2015 meeting, the GSA Governing Council approved the following definition.

'Geotourism is tourism which focuses on geology and landscape as the basis for providing visitor engagement, learning, and enjoyment'.

4. IUCN World Parks Congress 2014, Sydney

A digital poster promoting geotourism was presented to the IUCN Congress <http://wpc2014.digitalposter.com.au/sessions/MOS3B>

5. AESC, July 2014

The Geotourism Sub Committee collaborated with the Earth Sciences History Group to put together a one-day symposium on geotourism at AESC 2014 which included two keynotes, 10 presentations and a panel session which focused on the theme 'Geotourism - The Potential for Employment Opportunities for Geoscientists'.

The two GSA groups had collaborated to put together a two-day pre-conference tour to the Blue Mountains World Heritage Area (including Jenolan Caves) but unfortunately this project was cancelled because of insufficient bookings. Nevertheless, work undertaken for this project, and with the assistance of Dr Ian Percival, this tour is now part of the post conference tour offerings for the international conference of the American Association of Petroleum Geologists to be held in Melbourne in September 2015. A separate pre-conference tour to Australia's Red Centre National Landscape is also being organised with the assistance of Chris Edgoose, Manager- Basin Geoscience of the NT Geological Survey (also a GSA Governing Councillor).

6. PROPOSED GEOTOURISM SYMPOSIA/SEMINARS

The Standing Committee is planning a one-day seminar in Brisbane to be organised in collaboration with the Qld Museum, Inspiring Australia, and Ecotourism Australia – to be held in 2015/2016.

Following the highly successful geotourism workshop organised by EA in association with Sustainable Economic Growth Regional Australia (SEGRA 2014) held in Alice Springs in October 2014, the Standing Committee has been invited to collaborate with the Geotourism Forum of EA in organising another workshop to be held at Bathurst in October 2015. The selected proposed theme of this workshop is to focus on geotrail development (including engagement with the Central West NSW modern mining trail coordinators).

The Standing Committee has offered assistance to the tour organisers of AESC 2016.

The Standing Committee has decided to focus its awareness building in WA by working with the Geotourism Forum of EA to support a major Geotourism workshop at the Global Eco conference to be held at Rottnest Island in November 2015. Discussions about this project have been undertaken recently with Ivor Roberts and Mike Freeman of the WA Department of Mines and Petroleum.

7. PROPOSED GEOTOURISM PROJECT

The Mid West Development Commission (MWDC) has recently contacted both the Geotourism Standing Committee and the Geotourism Forum of EA for advice relating to a project which seeks to establish WA's first major geotourism development to be built on a 'geotrail' model, focused on the Murchison subregion of WA. The MWDC believes that the ancient Murchison geology provides the ideal platform for unique, nature-based tourism experiences of global significance, particularly to the 'experience seeker / dedicated discoverer' market. The Mid West Tourism Development Strategy (2014) concluded that the region's iconic nature-based tourist attractions were not developed to their potential and that its visitor appeal was not fully realised. The Strategy identified geotourism in the Murchison subregion as a potential 'game changing' tourism initiative, with capacity to help the region realise its potential as a major tourism destination in its own right.

An expert panel comprising Dr Neil Williams (representing the GSA), Bruce Leaver (representing EA), and Alan Briggs (representing the Forum Advocating Cultural and Eco-Tourism (FACET)) with additional input from Perth based GSA member, Mike Freeman, provided the MWDC with information and technical information. This enabled the finalisation of a draft EOI proposal to be submitted by the MWDC on the basis of a proposed partnership with Murchison local governments, the Geological Society of Australia, Forum Advocating Cultural and Eco-Tourism (FACET) and EA. The EOI has proposed that funding totalling \$600,000 be sought for this project.

As of 31 March 2015, the Governing Council is considering whether it will be appropriate to participate in this project if funding approval for this project is approved and received through the WA government's Royalties for Regions program.

8. GEOTOURISM PROMOTION AND PARTICIPATION

Following the publication of the first edition of the **Geotourism Map of NSW** produced by Cartoscope Pty Ltd in 2013 with the valued technical input of McElroy Bryan Geological Services (and supported by the GSA), the company has now decided to update the map's information. The first edition of this state map was an outstanding success and very few of the 100,000 printed copies remain. In particular, this double sided A0 size map has proved to be a very popular hand-out state-wide through regional visitor centres, educational institutions, geoscience organisations, and with the wider community.

The second edition will update the localities together with photos and text information. As with the previous map, the described near 100 localities are publically accessible and give overview details of geotourism interest. The new edition will also give more information on the type and amount of minerals from a mining site. As with the previous edition, the map will be freely available and financial sponsorship for another print run of at least 50,000 copies is currently being sought.

Membership of the LinkedIn Discussion group ‘**Australian Geotourism Development**’ now totals 203 members and continues to grow. A repository for the posting of geotourism industry information is now available at <http://www.leisuresolutions.com.au/index.php/geotourism-industry-groups/>

Regular articles promoting Geotourism are now regularly appearing in the publications of the GSA, The AusIMM and recently in the newsletter of the AIG.

Angus M Robinson

Chair, Geotourism Standing Committee

27th April 2015

2015-2016

2015/2016 Annual Report of the Geotourism Standing Committee of the Geological Society of Australia (GSA)

THE GEOTOURISM STANDING COMMITTEE

- * Chair - Angus M Robinson, Managing Partner, Leisure Solutions®, Sydney
- * Tom Bateman, linkage with the AIG, Perth
- * Michael Comfort, Section Leader, Geoconservation Section, Tasmanian Department of Primary Industries, Parks, Water and Environment, Hobart (resigned 3rd March 2016)
- * Bob Conroy, Administrator, Jenolan Caves Trust, Sydney
- * Professor Ross Dowling OAM, Foundation Professor of Tourism and Associate Head, School of Business, Edith Cowan University, Perth
- * Vicki Pow, Canberra (resigned 10th August 2015)
- * Associate Professor E B Joyce, Earth Sciences School, The University of Melbourne, Melbourne
- * Bruce Leaver, Chairman, Sapphire Coast Tourism, Cobargo, NSW
- * Ian D Lewis, Director, Kanawinka Geopark, Adelaide
- * Professor Suzanne Miller, Director and CEO, Queensland Museum, Brisbane
- * Young Ng, Founder and Chair of the Hong Kong Association for Geoconservation, Sydney
- * David Robson, Associate, Leisure Solutions®, Sydney
- * Geoffrey Sharrock (linkage with The AusIMM), Newcastle
- * David Tucker, Principal, Western River Pty Ltd, Perth
- * Neil Williams, University of Wollongong, Canberra (resigned 14th January 2016)
- * Monica Yeung, Director, Gondwana Dreaming, Canberra

Correspondents:

- * Veronica Blazely, Director, Natural Heritage Section, Department Environment, Canberra
- * Patrick McKeever, Chief of the Earth Science Section, UNESCO.

The Standing Committee met on four occasions during the year with working groups established in the areas of

- policy and advocacy;
- communication and education;
- symposia and seminars, geoheritage;
- karst areas, geoparks and geotrails; and
- national landscapes

SUBMISSION TO THE CHIEF GOVERNMENT GEOLOGISTS COMMITTEE

On 12th January 2016, the GSA President, Dr Graham Carr has made a submission to the Chief Government Geologists Committee, prepared by the Geotourism Standing Committee, and which is intended to inform the Chief Government Geologists Committee of recent geotourism developments in Australia and the potential of the geotourism industry offers for employing geoscientists and becoming an important customer for the goods and services of geological surveys of Australia and their equivalents.

This submission (in full) http://www.leisuresolutions.com.au/wp-content/uploads/2015/02/Geotourism_Chief-Govt-Geologists_briefing_4-January2016.pdf addressed the following matters which are summarised below.

Geotrails

Recently, it has been realised that a geotrail can deliver geotourism experiences through a journey linked by an area's geology and landscape 'as the basis for providing visitor engagement, learning and enjoyment.'

Geotrails do offer the advantages of

- relating directly to the tourism experience of a journey linking destinations;
- having universal appeal, and do not compete with or impact on land management/access issues; and
- are relatively easy to establish and represent a very cost-effective means of enhancing regional development.
- should be constructed around routes currently used by tourists i.e., geotrails should form logical journeys linking accommodation destinations.
- should meld the geological heritage features of a region with a cohesive story; and
- should incorporate and package in the biodiversity and cultural components (including mining heritage) of the region through which the geotrail traverses.

By way of example, through the auspices of the Geotourism Standing Committee, the GSA has recently made a submission dated 25th September 2015 in respect of an EOI for tourism

services Uluru and Kata Tjuta National Park within the Red Centre National Landscape. The GSA believes there is a significant opportunity for regional tourism in the earth history story, not only relating to Uluru and Kata Tjuta but using the park as a base for exploring the geoh heritage of the greater region. For example, the existing Red Centre Way (embracing the Mereenie Loop) represents an excellent example of a geotrail which can achieve this objective, as well as linking the Region to the various cultural and environmental interpretative facilities located in Alice Springs. <http://www.slideshare.net/leisuresolutions/global-eco2015-geotourismangusmrobinson>

Western Australia's Mid West Development Commission (MWDC) has recently contacted both the GSA Geotourism Standing Committee and the Geotourism Forum of Ecotourism Australia Ltd, for advice relating to a project which seeks to establish WA's first major geotourism development to be built on a geotrail model, focused on the Murchison sub-region of WA. The MWDC believes that the ancient Murchison geology provides the ideal platform for unique, nature-based tourism experiences of global significance, particularly to the 'experience seeker / dedicated discoverer' market. The Mid West Tourism Development Strategy (2014) concluded that the region's iconic nature-based tourist attractions were not developed to their potential and that its visitor appeal was not fully realised. The Strategy identified geotourism in the Murchison sub region as a potential 'game changing' tourism initiative, with capacity to help the region realise its potential as a major tourism destination in its own right.

In Victoria, the Kanawinka 'Geopark' covering the volcanic and karst region of western Victoria and south-east South Australia has now been marketed as a geotrail. Recently, two local government authorities (Mount Gambier and Southern Grampians) agreed to provide limited logistic support for a continuing geotrail arrangement and with added support of local community groups, still retaining the name 'Kanawinka Geopark.'

Geoparks

Geotourism attractions are now being developed around the world primarily as a sustainable development tool for the development of local and regional communities. A major vehicle for such development is through the concept of 'geoparks.' A geopark is a unified area with geological heritage of international significance and where that heritage is being used to promote the sustainable development of the local communities who live there).

Geoparks can choose to evolve through a series of levels from 'aspiring,' 'national,' 'regional' (e.g., European or Asia-Pacific Regions) to 'global.' There are now hundreds of geoparks around the world. Support to individual geoparks is offered through the Global Geoparks Network Bureau which currently represents 120 members from 33 countries. The original target of the Global Geoparks Network was to establish 500 geoparks around the world. The number is growing at a rate of about 10 new global geoparks per year.

A decision to establish global geoparks as UNESCO sites was taken by Member States at the 38th UNESCO's General Conference, the governing body of the organisation, which met in Paris

from 3-18 November 2015. This new branding formalises a relationship with Geoparks first established in 2001. Global Geoparks have become an increasingly important tool for UNESCO to engage Member States and their communities in Earth Sciences and geological heritage. During the UNESCO's General Conference, Member States also decided to endorse the statutes of a new international programme: the International Geoscience and Geoparks Programme (IGGP). This allows the organisation to more closely reflect the societal challenges of Earth Science today and provides international status to a former network of sites of geological significance.

In China, there are three levels of geoparks: provincial, national, and global geoparks, as well as mining parks. They are all managed by local county or municipal governments under the direct supervision of the Ministry of Land and Resources. Currently, there are over 320 provincial geoparks in China, among which 200 have already gained national status. With 33 of these global geoparks (including Hong Kong Geopark) having acquired global status, China manages by far the largest number of global geoparks in the world.

One option for geopark development in Australia involves the establishment, at the behest of state and territory governments, of geoparks over lands (e.g. national parks) which are already protected whilst automatically removing any land alienation (perceived or otherwise) concerns about geoparks, it provides a mechanism for national parks to acquire enhanced branding attributes.

In NSW, one particular outcome arising from the Sustainable Economic Growth for Regional Australia (SEGRA) 2015 Geotourism Workshop held in October, is interest expressed by senior officers of the Orana Regional Development Authority (RDA) and the NSW Department of Industry - Industry Policy, Economics & Regional Development, whereby a specific project proposal for the development of a geopark over an area embraced by the Warrumbungles National Park is now being mooted. It is proposed that this project would also have support from the local government authority and the Australian National University with its interest in the redevelopment of the Sidings Springs Observatory and could well be eligible for applying for a major funding grant from an available State Government regional development funding scheme. It is conceivable that the Western Research Institute Ltd in Bathurst may also have a role to play in this regard in scoping out the economic benefits of this proposal.

In North Queensland, the Shire of Etheridge has advised that it wants to explore a case for a major geotourism initiative, a process which will involve close consultation with the Queensland State Government and other stakeholders in the tourism and mining areas. It is understood that this concept has support within higher echelons of the new State Government.

UPDATE: The Chief Executive of the Etheridge Shire Council has subsequently advised that he has gained the support of Savannah Way Ltd for the establishment of a geotrail that starts in Cairns and travels across Northern Australia along the Savannah Way to Broome in Western Australia.

In addition, Etheridge Shire Council has signalled its desire for Etheridge Shire to be established as a geopark and to establish local geotrails within the Geopark. He has also advised that each Local Government area along the proposed Savannah Way GeoTrail establish local geotrails, and that a working group of Savannah Way member organisations (chaired by the Chairman of the GSA Geotourism Standing Committee) be established under the auspices of Savannah Way Ltd to work through the geotrail/ geopark recognition process on the basis that each Local Government area be responsible for covering their own costs associated with the establishment of the geopark/trail. It is understood that the Queensland Tourism Minister, the Hon Kate Jones MP, has expressed strong support for this initiative.

Australia's National Landscape Programme

In Australia, a somewhat equivalent land use to geoparks is the Australian National Landscape (ANL) Programme. This government initiative has been led until recently by a partnership of Parks Australia and Tourism Australia but embracing strong local development of strategies and activities. The programme represents a long-term national strategic approach to tourism and conservation which aims to highlight the value of our remarkable natural and cultural environments as a tourism asset, improving the quality of visitor experiences in those regions, and in turn, increasing support for their conservation. There are now 16 designated National Landscapes in Australia. With its integrative focus on landscapes as a whole, the development of geotourism within each landscape aligns with the core focus and sustainable development of each landscape region.

Designated Australian National Landscapes are similar to geoparks in that they

- have very similar goals relating to local development, education, and experiential tourism (i.e., 'geotourism'); and
- share the concept of delineating boundaries defined by visitor experiences and are not based on any existing land management boundaries.

However, designated national landscapes do not focus on fostering geoconservation, but have a broader 'natural heritage' remit. Moreover, the potential exists for individual National Landscapes to seek geopark branding should there be a view that the global branding would enhance the geoscience attractiveness of these areas for international visitors and/or enhance regional development opportunities for state/territory governments.

Conclusions

Geotourism offers another benefit by raising public interest in geoscience, particularly as a means of encouraging young people to see that a career path based on a geoscience qualification can open up a wider range of future employment opportunities. Based on the anecdotal observations of travellers enjoying a quality geotourism experience 'in the field,' it is

now being recognised that the educative (and ‘excitement’) value greatly augments the more traditional experiences such as offered by special exhibitions and by natural history museums.

The concept of geotrails has been promoted this year through two major geotourism workshops which formed part of the SEGRA 2015 and Global Eco 2015 conferences.

Recommendations

The Chief Government Geologists Committee (CGGC) acknowledges the importance and differences inherent in geotrails, geoparks and Australia’s National Landscape Programme in the delivery of geotourism initiatives.

In the near future, the GSA Geotourism Standing Committee has identified that in some jurisdictions, there may be a move to gazette existing protected areas e.g., national parks, world heritage areas, and the like as geoparks following a process of wide consultation with community groups, NGOs and government agencies. It is therefore recommended that the CGGC endorses in principle the relevance of geotrails and geoparks as key delivery mechanisms of geotourism in circumstances where they are deemed by Australian governments to be appropriate and necessary to support government development imperatives.

Subsequently Dr Bill Shaw, President of the Australian Geoscience Council (AGC), advised constituent members that “the AGC is pleased to offer our congratulations and further support for this excellent initiative. We consider it will be worthwhile also supporting and publicising this through the media outlets of our various Member organisations as much as possible.” With the support of Standing Committee members (and AGC Past President) Dr Neil Williams, Dr Shaw has also confirmed the awarding of a financial grant from the AGC to the Standing Committee to assist it in facilitating geotourism development.

It is understood that the Chief Government Geologists Committee will be formally considering this submission at its annual meeting in May.

ACHIEVEMENTS OF THE GEOTOURISM STANDING COMMITTEE DURING 2015/2016

1. Further Engagement with the Australian National Landscapes Programme and Chinese UNESCO Global Geoparks

National Landscapes

Engagement with the Australian National Landscape Programme has continued.

Subsequently, as part of the ‘Seeing the Results’ phase of the Programme, Parks Australia (and Tourism Australia) have stepped back from a central coordination role, and instead have offered limited funding to the peak industry association, Ecotourism Australia Ltd (EA) to enable it to administer the programme and co-ordinate the development of a transition

plan for the programme to become financially sustainable. However, it is now understood that the Programme will be formally discontinued after 30th June this year.

Nevertheless, in September 2015, both the Red Centre and the Blue Mountains/Jenolan Caves National Landscapes featured as the selected tour destinations for delegates attending the international convention of the American Association of Petroleum Geologists (AAPG) in Melbourne. These tours were co-led by the Geotourism Standing Committee Chair, and in the Red Centre with GSA Governing Councillor Christine Edgoose, and in the Blue Mountains, Dr Ian Percival, Chair of the GSA NSW Division Geoheritage Sub Committee. The petroleum geologists visiting the Red Centre were able to inspect the source and reservoir rocks of the Mereenie Sandstone of the Amadeus Basin, and those visiting the Blue Mountains, to see some heritage sites associated with Australia's early oil shale and coal mining industry.

The tour to Jenolan Caves included a distinguished dinner address by the compelling and charismatic David Hay, recently the cultural initiatives officer and tour guide at Jenolan. In his address, David brought to life the visit of Charles Darwin to the Blue Mountains in 1836, citing Darwin's observations about the geological history of the Blue Mountains and the role of the platypus in forming evolutionary theory, noting that platypus can be sighted in the Blue Lake at Jenolan Caves. David's fascinating address, which was inspired by a GSA Earth Sciences History Group cohort (comprising Dr David Branagan, Dr Ian Percival, Dr John Pickett and Angus M Robinson) can be viewed at <http://preview.tinyurl.com/outgu8w>

The Geotourism Standing Committee Chair and Christine Edgoose have subsequently collaborated to write a geotourism feature on the 'Big Red Centre' national landscape which will be published in the March issue of the *GEOExPro* magazine for petroleum geologists around the world. The Editor of this publication has agreed to publish a follow-up article on a West Australian national landscape in 2017.

Other Standing Committee members are directly involved in the former Australian National Landscapes Program. Professor Ross Dowling is the Chair of the Steering Committee for the *Great South West Edge* National Landscape in WA (in which the 2016 SEGRA conference will be held later in the year), and Bruce Leaver plays a key role in the tourism management of *Australia's Coastal Wilderness* Landscape in NSW/Victoria. In addition, Committee members A/Professor Bernie Joyce and Ian Lewis are working with a Melbourne-based recent geoscience graduate to develop a GeoTreat supported 'geotrail' overview of the Great Ocean Road National Landscape. The support of the Adelaide Branch of The AusIMM has been sought in seeking geological input for a proposed GeoTreat coverage of the Kangaroo Island National Landscape.

The Geotourism Standing Committee Chair has been active in identifying Australian Government (small and major grant respectively) funding opportunities for national landscape directed projects particularly, through the auspices of the 'Inspiring Australia' programme of the Department of Industry, Innovation and Science and the 'Stronger Regions' programme of the Department of Regional Development and Infrastructure.

Collaboration with the Geological Society of China

With assistance of Dr Young Ng, the Geotourism Standing Committee has continued to facilitate preliminary overtures from interested Global Geopark managers in China aimed at developing bi-lateral collaboration arrangements between China and Australia's National Landscapes regions.

During the year, efforts have been directed at identifying a suitable geoscience-focused professional grouping in China i.e. The Geological Society of China (GSC) which could be encouraged to develop a broader co-operation arrangement with the Geotourism Standing Committee of the GSA on the basis that such an agreement might well be endorsed by the respective national governments.

A Memorandum of Co-operation between the two societies has now been agreed to, and scheduled to be executed at the AESC 2016 with the following representatives of the GSC,

* Professor Chen Anze (Delegation Leader)

Research Fellow, Chinese Academy of Geological Sciences

Founder, Institute of Tourism Earthsciences and Geoparks, Geological Society of China

* Professor Wang Xiaolie

Director, General, Chinese Academy of Geological Sciences

Vice President, China Geological Survey

* Professor Wu Zhenhan

Vice President, Chinese Academy of Geological Sciences

* Professor Xu Tao

Director, Institute of Tourism Earthscience, China University of Geosciences

It is proposed that any co-operation agreement could embrace areas of activity which could include

- growing and enhancing the level of best practice nature-based tourism in both China and Australia;

- progressing protection, conservation and presentation of natural and mixed protected areas, geoparks (in China and in Australia, where approved by governments), national parks and reserves (in Australia), Australian national landscapes and areas on the World Heritage List (as defined in the World Heritage Convention 1972) areas (both countries);
- exploring opportunities to promote geotourism through mechanisms such as geotrails and national mining parks;
- raising the profile of China and Australia as world-leading nature-based tourism destinations;
- exploring other co-operative projects such as participation in conferences; and
- fostering the development of 'sister park' relationships between China and Australia.

2. Conferences/Symposia

In October, the Geotourism Standing Committee co-hosted a **Geotourism Workshop at the Sustainable Economic Regional Australia (SEGRA 2015) conference in Bathurst**. Significantly, the Mayoral Welcome reception for SEGRA 2015 was held in the Australian Fossil & Mineral Museum, now the home of the internationally renowned Somerville Collection. SEGRA was well attended by representatives of state, regional development, and local government, all keen to discuss and identify opportunities to enhance regional development in Australia.

The geotourism workshop focused this year on 'Geotrails – creating new journeys for geotourism,' a concept which seeks to develop an extended journey that follows a logical sequence and connects otherwise unrelated towns, districts and attraction through thematic interpretation based upon geological and landscape features. The opening presentation addressed the development of a formative Red Centre Geotrail of which Uluru is now an iconic global attraction. Dan Cove, formerly Operations Manager of Jenolan Caves, and then the Chair of the Geotourism Forum of the workshop co-host (Ecotourism Australia) explained how geotrails can offer genuine potential for both adding new dimensions to a regional visitor experience and as a tool for encouraging extended travel time within a region.

In his presentation, Ian D Lewis, Director of the Kanawinka Geopark/Geotrail, illustrated how the geopark promotes rural tourism and landscape care for the many volcanoes, famous caves and coastline features across the area of Western Victoria and South-Eastern South Australia, encouraging visitors to select from a number of highway trails through the region via accommodation hubs. Ken Moule, Chief Technical Officer of Global GBM, showed how the contribution of technology to the tourism experience opened the way for a new regional imitative 'around map enabled' mobile apps to economically promote attractions and enhance the visitor experience.

Dr Neil Williams, now an honorary professorial fellow at The University of Wollongong, put the case that the successful development of geotourism across Australia is dependent on quality

information on the nation's geology, and how best to bring together geoscience and tourism expertise in support of further geotourism development across regional Australia. The final speaker, Phil Smart, President and Founder, Gondwana Coast Fossil Walk Inc. illustrated how, that in recent years, the geotourism potential of the Ulladulla rock platforms had been developed by his team of volunteers into a successful tourist attraction. Phil also described the extensive work that had been carried out in establishing the Ulladulla Geological Time Walk, which was successively launched in December.

Geotrails were discussed at the **Geotourism Workshop forming part of the Global Eco Conference of Ecotourism Australia** held at Rottnest Island on 19th November 2015.

To supplement various presentations by representatives of the GSA Geotourism Standing Committee (including Professor Ross Dowling), Dr Ivor Roberts and Michael Freeman of the WA Department of Mines and Petroleum, referring specifically to the Rottnest Island geological setting explored links between geotourism and ecotourism, focusing on how geotourism can expand the visitor's experiences in natural areas, allowing for enhanced revisiting through the increased depth of understanding of how the features formed through geological times to arrive at their present forms. Alan Briggs from Murdoch University referred to research being undertaken which considers the process for establishing a community led geopark, initiated by the community, for the community. Albert Teo, Deputy Chair, Asian Ecotourism Network, illustrated how geotourism was being incorporated in strategies plan to take his companies Borneo Eco Tours and Sukau Rainforest Lodge to 'National Geographic Unique Lodges of the World' status.

In a keynote address to the main conference, Dr Young Ng provided information about how geoparks in China have considerably contributed to public interest in geology and have boosted visitation to regional areas of the country. The convening of the Global Eco Geotourism Workshop has resulted in government officials from South Australia, Western Australia and Norfolk Island all expressing interest in reviewing how the application of geotourism can stimulate regional development and tourism visitation. Global Eco 2016 will be held in Hobart on 21-23 November 2016 and is most likely to include another geotourism workshop.

With the assistance of Ian D Lewis, discussions have now been initiated with officials of the South Australian Government with a geotourism roundtable planned to follow AESC 2016, and to involve Professor Patrick McKeever whilst he is present in Australia. Arrangements are also being made with the Australian Department of Environment to hold a further roundtable in Canberra to discuss and agree on administrative procedures to be managed by the Australian Government in the event that a State or Territory Government seeks the approval of the Australian Government to advance any future UNESCO Global Geopark application.

Under the leadership of A/Professor Bernie Joyce, the Geotourism and Geological Heritage Committees have been collaborating to convene a **two-day symposium on geotourism and geoheritage at AESC 2016** in Adelaide.

3. Queensland Division Geotourism Activities

In May this year, the GSA Queensland Division and (supported by the Geotourism Standing Committee represented by Professor Suzanne Miller) launched a new application 'Geotourism Brisbane' which chronicles Brisbane's building stones as part of a self-guided walking tour originally developed for the International Geological Congress in 2012. The tour has recently been extended and built into a mobile app which presents a GPS linked map with hot links to the history of each building and details of the building stones used along with both recent and historical photographs. The App was configured through the Global GBM Enterprise Mobility suite (with much appreciation to Ken Moule, Chief Technical Officer of Global GBM) from content provided by the GSA and is available for free download from Google and Apple Stores.

<https://play.google.com/store/search?q=geotourism%20brisbane&c=apps&hl=en>
<https://itunes.apple.com/au/app/geotourism-brisbane/id938540304?mt=8>

4. New South Wales Division Geotourism Activities

The interpretation of geotrails can be assisted through the production of hard-copy maps. Following the publication of the first edition of the **Geotourism Map of NSW** produced by Cartoscope Pty Ltd in 2013 with the valued technical input of McElroy Bryan Geological Services (and supported by the GSA), the company has now decided to update the map's information. The first edition of this state map was an outstanding success and very few of the 100,000 printed copies remain. In particular, this double sided A0 size map has proved to be a very popular hand-out state-wide through regional visitor centres, educational institutions, geoscience organisations, and with the wider community.

The second edition will update the localities together with photos and text information. As with the previous map, the described near 100 localities are publically accessible and give overview details of geotourism interest. The new edition will also give more information on the type and amount of minerals from a mining site.

As with the previous edition, the map will be freely available and financial sponsorship for another print run of at least 50,000 copies is currently being sought. As was the case for the first edition, both gold and silver sponsor logos with contact web address, will be listed on the back of the folded A0 map representing an excellent opportunity for promoting sponsors to a very broad, community-based audience. Standing Committee member David Robson is assisting Cartoscope in securing sponsors for this project.

Dave Robson is also facilitating a collaborative venture being directed at Centennial Parklands (and involving the three major botanical gardens in Sydney) with the additional collaboration of the Geological Survey of NSW, the NSW National Parks and Wildlife Service, and the Department of Earth and Planetary Sciences of Macquarie University aimed at developing a **Sydney Basin Geotrail** to be launched for the 2017 Sydney Science Festival.

Standing Committee members Angus M Robinson, Dr Young Ng and Geoffrey Sharrock have submitted a poster presentation at the 6th Annual Mined Land Rehab Conference to be held in Singleton in early April. The Geotourism Standing Committee Chair has also been invited to join an ‘expert panel’ to lead discussions about the future of the Hunter Valley region. The poster presentation entitled ‘Proposed Hunter Valley National Mining Park – A Vision Beyond Mine Site Rehabilitation’ proposes the establishment of the largest national mining park in the world to be established – a fitting celebration of the significant role that mining has played for Australia’s development – first undertaken by Europeans with coal mining in Australia commencing near Nobbys Head in Newcastle in the 1790s.

Created and promoted by the NSW State Government, the authors propose that this iconic ‘park’ could embrace the region including mining and mining purposes lands from the Port of Newcastle and the Lower Hunter, Cessnock through to the Upper Hunter, and be nurtured within a regional, collaborative, multi-land use strategy which will provide for specified development within rehabilitated mined areas with the following uses:

- native flora and fauna habitat conservation – all connected through existing and proposed corridors;
- ‘soft adventure’ recreation;
- coal mining heritage sites, geosites and geotrails;
- areas set aside for renewable energy generation (solar arrays, wind farms, biomass production) and embracing light industrial sites for industry services and ‘value adding’ manufacturing;
- innovative, ‘value add’ manufacturing; and
- engagement with the six strategic hubs of the Strategic Aboriginal Culture and Enterprise Scheme of the Wonnarua Nation Aboriginal Corporation.

As one key outcome, it is proposed that the strategy delivers a geotourism destination of global significance which would incorporate the outstanding wine tourism and other natural heritage attributes of the Hunter Valley as well.

5. Geopark/Geotrail Proposals

As a result of the work of the Geotourism Standing Committee (as reported in the Chief Government Geologists Committee submission), active proposals are now being developed by government agencies in Western Australia, Queensland and New South Wales with discussions recently initiated with government officials in South Australia.

6. Publicity and Promotion

Membership of the LinkedIn Discussion group ‘**Australian Geotourism Development**’ now totals 246 members and continues to grow at a rate of some 20% per annum. A repository for the posting of geotourism industry information is now available at <http://www.leisuresolutions.com.au/index.php/geotourism-industry-groups/>

Regular articles promoting geotourism are now regularly appearing in the publications of the GSA and The AusIMM.

It is also hoped that as a result of recent discussions held with representatives of the West Australia Division late last year in Fremantle, a higher level of focus will be directed at assisting in promoting geotourism development in West Australia – the convening of the SEGRA 2016 event at Albany under the leadership of Professor Ross Dowling does provide an ideal opportunity for Division engagement. Already, David Tucker (assisted by David Robson) has offered support to geologists in Kalgoorlie wishing to enhance the geotourism experience in the WA goldfields.

Angus M Robinson FAusIMM (CP)
Chair, Geotourism Standing Committee
 31st March 2016

2016-2017

2016/2017 Annual Report of the Geotourism Standing Committee of the Geological Society of Australia (GSA)

THE GEOTOURISM STANDING COMMITTEE

- **Chair - Angus M Robinson[#]**, Managing Partner, Leisure Solutions[®], New South Wales
- **Alan Briggs**, PhD candidate, Murdoch University, Western Australia
- **Bob Conroy**, Administrator, Jenolan Caves Reserve Trust, New South Wales
- **Professor Ross Dowling OAM**, Foundation Professor of Tourism, School of Business and Law, Edith Cowan University, Western Australia
- **Michael Freeman** (linkage with the AIG)
- **Kasia Gabrys**, Manager, Cultural Heritage & Biodiversity Management, Kakadu National Park, Northern Territory
- **A/Professor Bernie Joyce**, Earth Sciences School, The University of Melbourne, Victoria
- **Bruce Leaver**, Chairman, Sapphire Coast Tourism, New South Wales
- **Ian D Lewis**, Honorary Director, Kanawinka Geopark, South Australia
- **Professor Suzanne Miller**, Director and CEO of Queensland Museums (and representing the Geotourism Standing Committee on the Geological Heritage Committee), Queensland
- **Dr Young Ng**, Chairman, Association for Geoconservation, Hong Kong
- **Dr Ian Percival**, NSW Geological Survey (representing the Geological Heritage Standing Committee)
- **Dave Robson**, Associate, Leisure Solutions[®], NSW

- **Geoff Sharrock** (linkage with The AusIMM)
- **Michael Vicary**, Mineral Resources Tasmania, Tasmania
- **Monica Yeung**, Gondwana Dreaming, ACT
- # Expert Spokesperson on Geotourism for the Australian Geoscience Council

Correspondent:

* Professor Patrick McKeever, Chief of the Earth Science Section, UNESCO

The Standing Committee met on four occasions during the year with working groups particularly active in the areas of policy and advocacy, communication and education, symposia, and seminars, geoheritage, and geopark and geotrail development.

During the year, Michael Freeman replaced Tom Bateman as the linkage to the AIG; long-serving member David Tucker retired to be replaced by Alan Briggs, and Kasia Gabrys joined the Committee to become the inaugural representative from the Northern Territory.

HIGHLIGHTS

- An uptake in awareness building of the opportunities offered through geotourism through the organisation of workshops at three conferences in Adelaide, Albany WA and Hobart.
- In response to interest in UNESCO Global Geopark development shown by local government and regional development agencies in two states, the engagement of the Standing Committee in providing advice and facilitation.
- The execution of a Memorandum of Cooperation between the Geological Societies of Australia and China.
- The establishment of a Geotourism Sub Committee in South Australia with a similar move being considered in Tasmania.
- The establishment of a geotourism portal as part of the GSA website rebuild.
- The emergence of proposed new geotrail projects in Tasmania, New South Wales, Western Australia, South Australia and Victoria.

UPDATED SUBMISSION TO THE CHIEF GOVERNMENT GEOLOGISTS COMMITTEE

In February, through the office of the Acting CEO of Geoscience Australia, the Standing Committee has made an updated submission to the Chief Government Geologists Committee to inform the Chief Government Geologists Committee of recent geotourism developments in Australia and the potential of the geotourism industry offers for employing geoscientists and becoming an important customer for the goods and services of geological surveys of Australia and their equivalents.

This submission (in full) http://www.leisuresolutions.com.au/wp-content/uploads/2015/02/Geotourism_Chief-Govt-Geologists_briefing_2017update.pdf

principally provided an update on the development of UNESCO Global Geoparks and Pre-Aspiring projects emerging in Australia, as follows.

UNESCO Global Geoparks

Geotourism attractions are now being developed around the world primarily as a sustainable development tool for the development of local and regional communities. A major vehicle for such development is through the concept of 'geoparks.' A geopark is a unified area with geological heritage of international significance and where that heritage is being used to promote the sustainable development of the local communities who live there.

Geoparks can evolve through a series of levels from 'pre-aspiring,' 'aspiring,' 'national,' 'regional' (e.g., European or Asia-Pacific Regions) to 'global.' There are now hundreds of geoparks around the world. Support to individual geoparks is offered through the Global Geoparks Network Bureau which currently represents 120 members from 33 countries. The original target of the Global Geoparks Network was to establish 500 geoparks around the world. The number is growing at a rate of about 10 new global geoparks per year.

UPDATE: As of 5th May 2017, UNESCO announced that Eight Geological sites in Asia, Europe and Latin America have become UNESCO Global Geoparks, therefore increasing the global total to 127 within 35 countries.

A decision to establish global geoparks as UNESCO sites was taken by Member States at the 38th UNESCO General Conference, the governing body of the organisation, which met in Paris from 3-18 November 2015. This new branding formalises a relationship with Geoparks first established in 2001. Global Geoparks have become an increasingly important tool for UNESCO to engage Member States and their communities in Earth Sciences and geological heritage. During the UNESCO's General Conference, Member States also decided to endorse the statutes of a new international programme: the International Geoscience and Geoparks Programme (IGGP). This allows the organisation to more closely reflect the societal challenges of Earth Science today and provides international status to a former network of sites of geological significance.

At the biennial Global Geoparks Network conference (GGN 2016) held at Torquay in the English Riviera UNESCO Global Geopark in September 2016, it was announced by the Geotourism Standing Committee that two Australian 'Pre-Aspiring' UNESCO Global Geopark proposals would be assessed during 2017. These projects celebrate two outstanding examples of volcanic geological heritage in Australia. <http://bit.ly/2qHITsz>

One project embraces the Warrumbungles in the Orana Region of New South Wales <http://www.warrumbungle.nsw.gov.au/news/articles/unesco-geopark-for-warrumbungle-region> and the other embraces the Etheridge area of Far North Queensland – known as 'The Golden Heart of the Gulf'. These major geotourism projects are being driven by local government with the support of Regional Development Australia with steering committees

being established to coordinate the work that needs to be undertaken to formally lodge nominations through the auspices of the Australian Government, at which stage these projects will be able to formally graduate to 'Aspiring' UNESCO Global Geopark Status. It is expected that the entire preparation, nomination, and decision-making process may take up to three years to complete. The Chair of the GSA Geotourism Standing Committee has been appointed Interim Chair of the Etheridge project steering committee (managed by Etheridge Shire Council) and also serves as a member of the Warrumbungles project steering committee (managed by the Warrumbungle, Gilgandra and Coonamble Shire Councils).

Of interest is the fact that both these projects were outcomes arising from the Sustainable Economic Growth for Regional Australia (SEGRA) 2015 geotourism workshop held in Bathurst, NSW. A geotourism spotlight session held at SEGRA 2016 in Albany, WA has also resulted in follow-up discussions with regional development agencies relating to the potential for geopark development in Western Australia.

In regard to the Warrumbungles project, it is proposed that this project would also have support from the Australian National University with its interest in the redevelopment of the Sidings Springs Observatory and the Black Skies designation of the Warrumbungle National Park. In North Queensland, the Shire of Etheridge Shire has advised that its project has support within higher echelons of the State Government because of its potential to develop tourism along the Savannah Way and to create another iconic destination in Far NQ to complement the Great Barrier Reef and the Daintree Rainforest World Heritage Areas.

ACHIEVEMENTS OF THE GEOTOURISM STANDING COMMITTEE DURING 2016/2017

1. Continuing Engagement with the Australian National Landscapes Programme and Chinese UNESCO Global Geoparks

National Landscapes

Engagement with the Australian National Landscape Programme has continued.

Established some years ago, the ANL Programme included the following regions: Australian Alps (New South Wales/Victoria), Australia's Green Cauldron (New South Wales/SE Queensland border region), Great Barrier Reef and Wet Tropics area (Queensland), Australia's Red Centre and Australia's Timeless North (Northern Territory), Australia's Coastal Wilderness (New South Wales/Victoria), the Flinders Ranges and Kangaroo Island (South Australia), the Great Ocean Road (Victoria), the Greater Blue Mountains and Sydney Harbour (New South Wales), the Kimberley, Ningaloo-Shark Bay and Great South West Edge (Western Australia), and Tasmania's Island Heritage.

As part of the 'Seeing the Results' phase of the programme, Parks Australia (and Tourism Australia) announced in 2014 that they had stepped back from a central coordination role

and would instead encourage local steering committees and the tourism industry to further advance this concept. As geotourism continues to develop both globally and within Australia, it is believed that more opportunities for geoscientist employment within government land management agencies will take place in these areas.

The Geotourism Standing Committee Chair and Christine Edgoose have subsequently collaborated to write a geotourism feature on the 'Big Red Centre' national landscape which was published in the April issue of the GEOExPro magazine for petroleum geologists around the world <http://www.geoexpro.com/articles/2016/04/australia-s-big-red-centre>

The Editor of this publication has agreed to publish a follow-up article on the Kimberley National Landscape in the April 2017 issue of this publication.

Other Standing Committee members are directly involved in the former Australian National Landscapes Program. Professor Ross Dowling is the Chair of the Steering Committee for the *Great South West Edge* National Landscape in WA (in which the 2016 SEGRA conference was held in October 2016), and Bruce Leaver plays a key role in the tourism management of *Australia's Coastal Wilderness* Landscape in NSW/Victoria.

Dr Young Ng has been working to promote the Australian National Landscapes as sites to be considered for inclusion in a proposed CCTV documentary filming program to be undertaken in Australia later in 2017.

Collaboration with the Geological Society of China

With the support of Dr Young Ng, the Geotourism Standing Committee has continued to facilitate preliminary overtures from interested Global Geopark managers in China aimed at developing bi-lateral collaboration arrangements between China and Australia's National Landscapes regions. During the year, a Chinese geopark delegation visited Western Australia and preliminary plans are being made for other visits to the Etheridge and Warrumbungle Pre-Aspiring Global Geopark areas later in 2017.

During the year, efforts have been directed at identifying a suitable geoscience-focused professional grouping in China i.e. The Geological Society of China (GSC) which could be encouraged to develop a broader co-operation arrangement with the Geotourism Standing Committee of the GSA on the basis that such an agreement might well be endorsed by the respective national governments.

A Memorandum of Co-operation between the two societies was executed at AESC 2016 by GSA President Graham Carr and Professor Chen Anze, Research Fellow, Chinese Academy of

Geological Sciences and Founder, Institute of Tourism Earthsciences and Geoparks, Geological Society of China.

Representatives of the Standing Committee have been invited and will be attending both the Asia Pacific Global Geopark Network Conference and a Geotourism conference to be held in China in September 2017.

2. Conferences/Symposia

Under the leadership of A/Professor Bernie Joyce, the Geotourism and Geological Heritage Committees have collaborated to convene a two-day symposium on geotourism and geoheritage at AESC 2016 held in June in Adelaide. The Geotourism segment of the program comprised the following presentations.

- Geotourism, Geotrails & Geoparks – Pathways for Future Development in Australia – Angus M Robinson
- The Blue Mountains & Jenolan Caves Geotourism Revival – Angus M Robinson
- Economic Impact Benefit of UNESCO Global Geoparks – a keynote address by Professor Patrick McKeever
- Geotourism in Western Australia – Alan Briggs and Ross Dowling
- Stakeholder Perceptions Towards Geotourism, Geotrails and Geoparks – Alan Briggs
- Tourism Earth Science: An emerging discipline generating new opportunities for earth scientists – Anze Chen, Young Ng and Tao Xu
- Twenty-Four Models of Geotourism – Tao Xu, Zhenyang Wu, and Anze Chen
- Using local geotrails to connect small volcanic geosites and provide new opportunities for geotourism – examples from the Kanawinka Geopark in the Newer Volcanic Province of South Eastern Australia – A/Professor Bernie Joyce
- Between a Rock and a Dry Place Geotourism in South Australia – P R James, I Clark, and J James

In October, the Geotourism Standing Committee co-hosted a **Geotourism Workshop at the Sustainable Economic Regional Australia (SEGRA 2016) conference** in Albany, Western Australia. The following presentations were featured.

- Geotourism: the key driver of tourism for regional Australia – Angus M Robinson
- Geoparks: A powerful new development vehicle for regional Australia – Professor Ross Dowling
- Australian Chinese Partnership Creating New Geotourism Opportunities – Dr Young Ng and Angus M Robinson
- Big data Analytics for Tourism Destination management – Professor G Michael McGrath

- Collaborative Tourism Infrastructure for Geotourism and Regional Tourism: Digital Disruption meets Tourism – Ken Moule
- The Digital Outback – Stuart Kidd
- Porongorup: a tourism case study – Alan Briggs
- Determining Geotrail Potential for Gunduwa Conservation Region of Western Australia – Alan Briggs
- Perceptions of a Geotourist – Neville Bryne

The **Geotourism Workshop forming part of the Global Eco Conference of Ecotourism Australia** was held in Hobart in November 2016 with the following presentations.

- Role of Geotourism in Australia's Nature Based Tourism Strategy 2025 – Angus M Robinson
- UNESCO Global Geoparks – Pointers for Australia – Angus M Robinson
- The West Coast Geotrail – Understanding the Landscapes and Geology of Western Tasmania – Ralph Bottrill
- Determining the Potential for Geotrails – Alan Briggs
- Geotourism in Western Australia – Alan Briggs
- A new form of geotourism with great marketing value: mass geotours in Hungary – Nikolett Csorvási

The Standing Committee will be working with the Geotourism Forum of Ecotourism Australia in co-convening geotourism sessions at SEGRA 2017 to be held in the Upper Gulf region of South Australia over the period 18-20 October and at GlobalEco 2017 in Adelaide over the period 27-29 November.

The Australian Geoscience Council has invited the Standing Committee to convene a Geotourism session at the AGC Convention scheduled for 14-18 October 2018.

The Standing Committee will also work closely with Dr Ian Percival of the Linnean Society of NSW in planned natural heritage symposia to be held in the Australian Alps (December 2017) and the Warrumbungles (September 2018).

3. Australian UNESCO Global Geopark Development

Following AESC 2016, a meeting was held with the Environment Minister and officials of the South Australian Government to discuss geotourism and potential geopark development in South Australia, and involving Professor Patrick McKeever, Chief of the Earth Science Section, UNESCO. Prior to the conference, arrangements were also made for Professor McKeever, accompanied by Professor Ian Plimer, and representatives of the Standing Committee to visit the Flinders Ranges including the Arkaroola Wilderness Sanctuary, to assess geopark potential

of these areas. Subsequently the Chair of the Geotourism Standing Committee was invited to join the geological reference group for the proposed Flinders Rangers World Heritage Area nomination.

Whilst in Australia, arrangements were made for Professor McKeever to meet with senior representatives of the Australian Department of Environment to discuss developments with the UNESCO Global Geopark Program. Professor McKeever also met with representatives of the Orana RDA and the Warrumbungle, Gilgandra and Coonamble Shire Councils in Coonabarabran, NSW to discuss the potential for global geopark development focused on the Warrumbungles.

At the request of the local government agencies, the Geotourism Standing Committee has since facilitated the development of both the Warrumbungle and Etheridge Pre-Aspiring UNESCO Global Geopark projects.

The Geotourism Standing Committee is establishing various technical reference groups to provide expertise in areas of geoscience, geoheritage and mineral heritage; in the latter case, for the Etheridge project, with an eye on mining heritage, representatives of the North Queensland and Far North Queensland branches of The AusIMM and the Queensland Museum have so far expressed strong interest, as has the AIG. For both projects, it is anticipated that representatives of the two state Geological Surveys and the National Park Services will also be closely engaged in the nomination process, given that the project areas embrace both protected and non-protected areas.

Pre-Aspiring Warrumbungle UNESCO Global Geopark, New South Wales

A UNESCO Global Geopark is a unified geographical area featuring one or more sites of international geological significance; the Warrumbungles, the Macquarie Marshes, the Pilliga and the Coolah Tops National Parks. Located just on the outskirts of the township of Coonabarabran, the ragged peaks and spires of the Warrumbungles are visible from the neighbouring shires of Coonamble, Gilgandra and Warrumbungle and are an internationally acclaimed tourist attraction steeped in geological history. Strong partnerships between stakeholders are essential to the success of UNESCO Global Geoparks. At a minimum, this should include the local governments around the Warrumbungle National Park (Coonamble, Gilgandra, Warrumbungle Shires embracing a total area of some 27,000 square kilometres), Regional Development Australia (RDA) Orana, the NSW National Parks and Wildlife Service, the Sidings Springs Observatory, and local indigenous communities. As this application is progressed, the three Shire Councils expect that other partners will choose to join the project, including local and regional tourism development organisations.

<http://www.warrumbungle.nsw.gov.au/news/articles/unesco-geopark-for-warrumbungle-region>

The Standing Committee has worked with the Steering Committee of the Warrumbungle project to commission the Western Research Institute Ltd in Bathurst to prepare a report which

will demonstrate the economic benefits of the Warrumbungle geopark project as well as for other geotourism initiatives in regional Australia, with seed funding already approved jointly by the Geological Society of Australia and the Australian Geoscience Council.

Pre-Aspiring Etheridge UNESCO Global Geopark, Queensland

The Pre-Aspiring Etheridge Global Geopark embraces the Etheridge Province of the North Australian Craton. The rocks of the Forsayth Sub province crop out in the Georgetown area and constitute a metasedimentary sequence deposited in an intracratonic rift setting with two major Proterozoic folding events affecting the rocks of the Forsayth Sub province, and that at least four additional episodes of folding have also been recognised. The rocks of the Forsayth Sub province host important gold mineralisation that includes the Etheridge Goldfield, the most significant of which is located at the former Kidston mine; this mineralisation is probably genetically related to Siluro-Devonian and Permo-Carboniferous intrusives of the Pama and Kennedy Provinces. Small, massive, strata bound concentrations of iron and base metal sulphides are known from the base of the Etheridge Group within the Forsayth Sub province. The Etheridge Province also includes significant occurrences of gemstones, notably agates and topaz, as well as hot springs.

Two geological events in the Cainozoic now feature as iconic geotourism attractions in the region, the most significant of which is the Undara Lava Tube System, truly unique in the world based on consideration of age, preservation, and lineal extent, as well as the geomorphological expressions within flat-lying sediments at Cobbold Gorge. Both of these landforms, as well as the other Proterozoic and Paleozoic landforms in the area proposed for the Global Geopark, have resulted in a diverse range of landforms with unique biodiversity characteristics including a rich assemblage of birdlife. Committed input from the Ewamian Aboriginal community is sure to identify sites exhibiting rich indigenous culture, including the Talaroo Hot Springs. In many respects, with the existing Lava Tubes, Gems and Gorges GeoTrail, a fully documented Savannahlander Geotrail and the location of the TerrEstrial Mineral and Fossil Museum, the Etheridge area exhibits much of the features of a defacto geopark.

It is worth noting that the Etheridge Shire is some 40,000 square kilometres in area (about 60 % of the size of Tasmania). Despite its size, Etheridge Shire is the home of some 1000 people located in five small towns, other smaller community-based localities and in over 150 pastoral stations. The largest settled area is Georgetown, located some 400 km west of Cairns.

The Savannah Way passes through Etheridge Shire; this journey (and potential geotrail) is Australia's 'Adventure Drive,' linking Cairns in North Queensland with the historic pearling town of Broome in Western Australia's Kimberley, via the natural wonders of Australia's tropical savannahs and the Northern Territory's Top End. The 3700-kilometre route links 15 National Parks and five World Heritage areas and the Pre-Aspiring Etheridge UNESCO Global Geopark.

4. Establishment of State/Territory Based Geotourism Sub Committees

- **SA Geotourism Sub-Committee (SAGTSC)**

The SAGTSC was established in August 2016, after formal endorsement by the GSA Governing Council of Dr Graziella Caprarelli as Chair and Dr Vic Gostin as Vice-Chair of the South Australia Branch.

To date the SAGTSC has held a number of formal meetings, including inaugural meeting of its Founding Members held on 30 August 2016 i.e., Graziella Caprarelli, Vic Gostin, Ian Lewis (GSA Geotourism Standing Committee Liaison), with apologies from Anna Petts (Member). Since the first meeting, the committee has expanded, and it now comprises a total of five Members, three Honorary Members, and two Observing Members of the South Australia Division of GSA.

It is intended that the SAGTSC and its composition to date be formally approved as one of the standing subcommittees of the GSA SA Division at the Divisional AGM to be held on 20th April 2017, with the obligation to report to the Division, in addition to the regular reports to the GSA Geotourism Standing Committee by way of its Liaison Member.

The principal aim of the SAGTSC is to promote and expand the concept of “geotourism” in South Australia by raising awareness of the State’s geological sites with tourism potential. In this context, the SAGTSC has sought to establish synergistic links with other relevant subcommittees in the South Australia Division, namely the Field Geology Guides Subcommittee (Chair: Barry Cooper), and the Geoheritage Subcommittee (Barry Cooper: Liaison). In addition, the SAGTSC members are strongly aware of the STEM (Science, Technology, Engineering, and Mathematics) education potential of geotourism, as well as the economic impact of such activities. Thus, the SAGTSC is strongly linked with the Education Subcommittee of the GSA South Australia Division (Chair - outgoing: Len Altman), as well as seeking connections with relevant activities in government organisations, such as the Geological Survey of South Australia, and the South Australia Department of Environment, Water and Natural Resources (DEWNR), by way of member representation on the committee.

Over the next 12 months, SAGTSC will be engaged with:

- (1) support for the process of nomination of the World Heritage Listing for the Flinders Ranges <http://www.naturalresources.sa.gov.au/aridlands/parks/world-heritage-nomination-for-the-flinders-ranges>
- (2) promotion of the ‘geotrails’ concept, and identification of sites with geotourism potential;
- (3) identification of links between geotourism and economic as well as cultural activities;
- (4) synergies and collaborations for the establishment of STEM education activities;
- (5) establishment of a multimedia digital presence;

- (6) organisation of open public events to disseminate information about geotourism in South Australia; and
- (7) participation in relevant conferences (e.g. SEGRA 2017 and Global Eco 2017).

- **Tasmanian Geotourism Sub Committee**

It has been agreed that a Tasmanian Geotourism Sub Committee be established with its first meeting scheduled for late April.

5. New South Wales Division Geotourism Activities

With Dave Robson working with Cartoscope Pty Ltd, plans are now underway to update and print Edition 2 of the highly popular Geotourism Map of NSW. As with the Edition 1, the double sided A0 size state-wide map will feature approximately 100 significant geological sites that are most accessible and well-known “visitor friendly”. It will cover magnificent geological formations, mining heritage and unique landscapes and include a representative picture of each site with a 20–40-word description of its significance.

Current sites will be reviewed with more significant geological sites being added and existing geological descriptions updated. More detailed information about each site will be available through www.geomaps.com.au, a website specially designed for this project.

It is planned to print 100,000 copies of this map which will be freely available. It will be distributed through the New South Wales Visitor Information Centre network, state and private schools, tertiary education facilities and to various tourism businesses throughout NSW. Many Visitors Centres in Queensland and Victoria have also expressed interest in stocking the map.

Content of Edition 2 will be finalised by late 2017 with printed copies available for release at the Local Government NSW Tourism Conference planned for March 2018.

Dave Robson is also facilitating a collaborative venture being directed by Centennial Parklands (and involving the three major botanical gardens in Sydney) with the additional collaboration of the Geological Survey of NSW, the NSW National Parks and Wildlife Service, and the Department of Earth and Planetary Sciences of Macquarie University aimed at developing a Sydney Basin Geotrail.

The Standing Committee Chair has been nominated by The AusIMM to be appointed as a Member of the Somerville Collection Board of the Australian Fossil and Mineral Museum in Bathurst.

6. Geotrail Proposals

With input from the Geotourism Standing Committee, active proposals are now being implemented or considered by various government agencies and/or university groups in

Western Australia (Murchison, Geraldton), Tasmania (West Coast Living Earth GeoTrail), Queensland (Brisbane Valley Rail Trail), New South Wales (Cessnock, Port Macquarie, and Ulladulla), South Australia (various projects) and Victoria (Kanawinka/Great Ocean Road area).

7. Publicity and Promotion

As a result of inspired support from the GSA Governing Council, a key feature of the GSA's new web site is the creation of a new 'public' portal focusing on geotourism <http://bit.ly/2irGlem>

Membership of the LinkedIn Discussion group '**Australian Geotourism Development**' now totals 288 members and continues to grow at a rate of some 20% per annum.

A repository for the posting of geotourism industry information is also available at <http://www.leisuresolutions.com.au/index.php/geotourism-industry-groups/>

Regular articles promoting geotourism are now regularly appearing in the publications of the GSA, the AIG and The AusIMM.

It is also hoped that as a result of continuing discussions held with representatives of the West Australia Division, a higher level of focus will be directed at assisting in promoting geotourism development in West Australia – the convening of the SEGRA 2016 event at Albany under the co-leadership of Professor Ross Dowling did provide some impetus for Division engagement. A similar outcome in Queensland may well be achieved through the enthusiastic support of Professor Suzanne Miller, Director and CEO of Queensland Museums.

Angus M Robinson FAusIMM (CP)

Chair, Geotourism Standing Committee

31st March 2017

2017-2018

2017/2018 Annual Report of the Geotourism Standing Committee of the Geological Society of Australia (GSA)

THE GEOTOURISM STANDING COMMITTEE

- Chair - Angus M Robinson[#], Managing Partner, Leisure Solutions[®], New South Wales
- Alan Briggs, PhD candidate, Murdoch University, Western Australia
- Bob Conroy, Administrator, Jenolan Caves Reserve Trust, New South Wales

- Professor Ross Dowling OAM, Foundation Professor of Tourism, School of Business and Law, Edith Cowan University, Western Australia
 - Mike Freeman (linkage with the AIG)
 - A/Professor Bernie Joyce, Earth Sciences School, The University of Melbourne, Victoria
 - Bruce Leaver, Chairman, Sapphire Coast Tourism, New South Wales
 - Ian Lewis, Honorary Director, Kanawinka Volcanic Geotrails, Victoria/South Australia
 - Professor Suzanne Miller, Queensland
 - Dr Young Ng, Association for Geoconservation, Hong Kong
 - Dr Ian Percival, NSW Geological Survey (representing the Geological Heritage Standing Committee)
 - Dave Robson, Associate, Leisure Solutions®, New South Wales
 - Geoff Sharrock (linkage with The AusIMM)
 - Michael Vicary, Mineral Resources Tasmania, Tasmania
 - Monica Yeung, Gondwana Dreaming, ACT
- # Expert Spokesperson on Geotourism for the Australian Geoscience Council

Correspondent:

* Professor Patrick McKeever, Chief of the Earth Science Section, UNESCO

The Standing Committee met on four occasions during the year with working groups particularly active during this year in the areas of policy and advocacy, symposia, and seminars, and geopark and geotrail development.

During the year, Kasia Gabrys resigned from the Committee as a result of her job relocation to Victoria from the Northern Territory. In addition, early in the year, Alan Briggs was appointed by the Governing Council to join the Standing Committee to represent Western Australia.

HIGHLIGHTS

- A continued uptake in awareness building of the opportunities offered through geotourism through the organisation of workshops at two conferences in Adelaide and Port Augusta, South Australia, and preparatory work in support of the AGCC 2018 event in Adelaide.
- Further support to proposed UNESCO Global Geopark development in two states with the engagement of the Standing Committee continuing to provide advice and facilitation.
- Linked to the Memorandum of Cooperation between the Geological Societies of Australia and China, execution in December 2017 in China of a historic Memorandum of Cooperation embracing a 'sister park' arrangement signed between the Zhijindong Cave UNESCO Global Geopark and the Jenolan Karst Conservation Reserve.

- The establishment of Geotourism Sub Committees in Tasmania and New South Wales.
- The emergence of proposed new geotrail projects in Queensland and Western Australia.
- Continuing discussions with government and the Geoscience Reference Group in regard to furthering the development of geotrains and geoparks in Australia.

GEPARK DEVELOPMENT IN AUSTRALIA

Discussions with the Chief Government Geologists Committee, now known as the Geoscience Reference Group (GWG)

During 2016, the Geotourism Standing Committee commenced a dialogue with the then Chief Government Geologists Committee), a grouping of Chief Executives representing all the state and territory geological surveys as well as Geoscience Australia. This dialogue was focused on explaining the principles of geotourism and delivery mechanisms such as UNESCO Global Geoparks and geotrains. In July 2017, GWG responded to the Standing Committee, noting the following operating trends in Australia relevant to geotourism development.

- The considerable interest in promoting geoheritage for public information and increased tourism revenue in regional Australia.
- The significant efforts by individual State/Territory Geological Surveys and Geoscience Australia in promoting geoheritage by publishing books, pamphlets, GIS-based apps, erecting explanatory signage etc describing sites and geotrains.
- Collaboration between State/Territory Geological Surveys, parks, and wildlife' agencies, member-based geoscience organisations, tourism bodies, and local governments or regional authorities in their jurisdictions to increase awareness of geo-and mining heritage generally and geoheritage sites, geotrains and areas.
- Many geoheritage sites are contained within and protected by conservation reserves and some State/Territory Geological Surveys have established small geoheritage reserves to further protect important sites.

The GWG then advised the Geotourism Standing Committee of the following views.

1. While more collaboration between interested parties would accelerate development of geoheritage benefits, the lead should probably come from local governments, regional authorities, and tourism bodies who have the most to gain from increased tourism activity.
2. Although geoheritage is not core business for Geological Survey organisations, they are willing to assist with specialist knowledge and where possible, minor funding.
3. Support could be given to the establishment of UNESCO Global Geoparks within existing conservation reserves. Outside of this protection, isolated sites and groups of related sites linked by geotrains should be the focus of geoheritage efforts.

4. Consistent with the position communicated by the EPHC, the GWG does not support the creation of UNESCO Global Geoparks without Commonwealth and State/Territory Government agreement.

UNESCO Global Geoparks

Geotourism attractions are now being developed around the world primarily as a sustainable development tool to support the economic development of local and regional communities. A major vehicle for such development is through the concept of 'geoparks.' A geopark is a unified area with geological heritage of international significance and where that heritage is being used to promote the sustainable development of the local communities who live there.

Geoparks can evolve through a series of levels from 'pre-aspiring,' 'aspiring,' 'national,' 'regional' (e.g., European or AsiaV-Pacific Regions) to 'global.' There are now hundreds of geoparks around the world. Support to individual geoparks is offered through the Global Geoparks Network Bureau which currently represents 127 members from 35 countries. The original target of the Global Geoparks Network was to establish 500 geoparks around the world. The number is growing at a rate of about 10 new global geoparks per year.

STOP PRESS. As of 17th April 2018, UNESCO has announced that a further 13 geological sites in Asia (China, Indonesia, Vietnam, Thailand, Japan, and South Korea), Europe, Africa and Canada have become UNESCO Global Geoparks, therefore increasing the global total to 140 within 38 countries. China has increased its total to 37 global sites.

Pre-Aspiring UNESCO Global Geopark proposals are currently those projects in Australia undergoing assessment to obtain community and government support prior to any application being lodged with UNESCO.

The process of developing a Pre-Aspiring UNESCO Global Geopark involves an 'on ground' assessment of the feasibility of any proposal brought forward by any grouping including government agencies. With compelling regional development imperatives in mind, two such proposals, the Etheridge region of Far North Queensland (some 40,000 square kilometres in area) embracing the entire Shire of Etheridge and the Warrumbungle region embracing three Local Government Areas - Warrumbungle, Gilgandra, and Coonamble located in Northwest NSW (some 27,000 square kilometres in area) have been subject to intensive assessment during 2017, following advice submitted to the Secretary General of the Australian National Commission of UNESCO advising that the 'pre-aspiring' nomination process had commenced. Progress achieved for these projects was reported to at the 5th Asia Pacific Global Geopark Network Symposium held in China in September 2017.

UNESCO Global Geoparks are 'single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education, and sustainable development (UNESCO, 2016). Even if an area has outstanding,

world-famous geological heritage of outstanding universal value, UNESCO has determined that it cannot be a UNESCO Global Geopark unless the area also has a plan for the sustainable development of the people who live there. To succeed, a UNESCO Global Geopark nomination must have the support of local people.

By raising awareness of the importance of the area's geological heritage in history and society today, UNESCO Global Geoparks provides local people with a sense of pride in their region and strengthens their identification with the area. The creation of innovative local enterprises, new jobs and high-quality training courses is stimulated as new sources of revenue are generated through geotourism, while the geological resources of the area are protected.

Of importance in the process is the realisation that 'while a UNESCO Global Geopark must demonstrate geological heritage of international significance, the purpose of a UNESCO Global Geopark is to explore, develop and celebrate the links between that geological heritage and all other aspects of the area's natural, cultural and intangible heritages.' In this context, the first task of the proponent is to address the issue of geological heritage of 'international significance.' In May 2017, the Governing Council of the GSA assigned the Geotourism Standing Committee the role of assessing the international geological merit of the current (and any future) pre-aspiring UNESCO global geopark proposals, based on the advice provided by the appointed geoscience/mining heritage reference groups, provided that any assessments are to be endorsed by the Governing Council before they are made external.

Etheridge Pre-Aspiring UNESCO Global Geopark Proposal

For the Etheridge proposal, a highly knowledgeable Geoscience and Mineral Reference Group appointed by Etheridge Shire Council and chaired by Ian Withnall has undertaken a considerable amount of work in defining the international significance of this region located west of the Atherton Tablelands in Far North Queensland, identifying some 20 key geosites in addition to the existing tourism attractions of Undara and Cobbold Gorge and the Talaroo Hot Springs area managed by the Ewamian Aboriginal Corporation. In addition, the reference group has developed a sophisticated GIS map of the region with smartphone connectivity, as well as excellent geological content for the proposed Savannahlander rail geotrail. A heritage specialist has also generated a fascinating overview of the mining heritage of the region.

The assessment process included consultation with all key stakeholders (e.g., indigenous communities, national parks, tourism resorts) undertaking individual self-assessments; consultation with key State Government agencies; and community consultation including information bulletins,

The geological (and natural and cultural heritage) assessment proved the easy part of the process. A relatively short 12-month period allowed for the assessment and nomination completion process, a decision which proved to be far too short to gain full community support.

Whilst National Parks, indigenous groups, and residents of townships were very supportive, because they understand the economic benefits of tourism, agricultural and small-scale mining groups as well as gemstone fossickers were not supportive, with a vigorous program implemented to dissuade Council from finalising the application. It was believed that the establishment of a Global Geopark upset the status quo. Issues raised were essentially fears of UNESCO control, more environmental regulation, and increased levels of tourism. The labels of 'UNESCO,' 'Geopark,' 'Ecotourism' etc., raised a range of concerns and fears.

Moreover, landholders, essentially graziers with long-term pastoral leases, feared that the proposed UNESCO affiliation would result in further regulation and restrictions curbing current and future activities and potentially leading to a World Heritage Listing. Many considered that the large area of application across the whole Shire included large land tracts which were considered unlikely to be of interest for tourism. The use of the term 'geopark' which was interpreted by many to imply some form of existing or potential environmental protection (aligned to an expanded national park network) and would create some form of land tenure at odds to their existing and ongoing land uses.

There were also fears that the UNESCO branding will generate a response by the State Government to impose an additional layer of environmental protection, even though UNESCO Global Geopark status does not imply restrictions on any economic activity within a UNESCO Global Geopark where that activity complies with indigenous, local, regional and/or national legislation. These fears were also shared by some elements of the mining industry involved in small scale mining operations.

Facing strong opposition, the proponent Etheridge Shire Council decided not to proceed with the UNESCO Global Geopark application, and instead to establish a stakeholder Geotourism Advisory Committee chaired by the Mayor to advance geotourism using the natural and cultural assets that have so far been identified.

An Alternative Geotourism Development Strategy for the Etheridge Scenic Area

Etheridge Shire Council is committed to developing tourism along with agriculture and mining as the three-fold basis of their forward regional development planning.

Council has now approved within the Shire of Etheridge, development of a major geotourism strategy which captures the aspirations of the pre-existing 'Unearth Etheridge' tourism strategy, providing additional natural and cultural heritage content; and through collaboration with other adjacent Local Government Authorities, establishment of strong geotrail linkages with geotourism attractions outside of the Shire, including Chillagoe and Herberton. This alternative is focusing on developing an expansive principal focus on key geotourism areas within the Shire of Etheridge but to create linkages with key attractions outside the Shire utilising dedicated geotrails. <http://bit.ly/2BfAnC2>

The alternative strategy will explore the opportunity of developing a pilot geotrail project for a participating grazer family and assisting the Ewamian Aboriginal Corporation in developing the

Talaroo Hot Springs site. In addition, Etheridge Shire Council has expressed interest in redevelopment of the TerrEstrial Visitor Centre with new displays, establishing interpretive signage at Copperfield Gorge at Einasleigh, and assessing the potential of establishing a Geological Time Walk at Georgetown.

The nominated 'Etheridge Scenic Area' will now be developed as a 'defacto geopark' but is now not subject to any assessment process through UNESCO.

Warrumbungle Pre-Aspiring UNESCO Global Geopark

In New South Wales, the Warrumbungle proposal focuses on the Warrumbungle National Park, which is already included on Australia's National Heritage List, a fact which in itself would seemingly pre-qualify the area as being of international geological significance.

This heritage listed Park extends over a rugged mountainous area of sandstone plateaux and ridges and many prominent trachyte spires, domes, and bluffs. The 233 square kilometres of the park are part of the Warrumbungle Mountains, an eroded volcano of about 13-17 million years in age. In addition to its monumental scenery, the Park contains a varied complex of important plant and animal communities. In July 2016, the Park was the first within Australia to be certified as a Dark Sky Park by the International Dark Sky Association.

The remainder of the Shire areas include pastoral areas as well as native bushland such as parts of the iconic Pilliga Forest. In this instance, however, there is concern within State Government that the establishment of any designation with some form of nominal 'park' status would result in land use conflicts with interests which are anti-development in nature. The Geological Survey of NSW would prefer that the geopark be contained only within the Warrumbungle National Park. It is quite evident that this issue will take some time to resolve even though there is strong support emerging from the State Government agency - Destination NSW - that the creation of a UNESCO global geopark will substantially enhance tourism visitation to the region.

Regional Development Australia (RDA) Orana, the NSW National Parks and Wildlife Service, Sidings Springs Observatory, and local indigenous communities have been identified by the project Steering Committee chaired by the Mayor of Warrumbungle Shire Council.

As the three Councils progress their application, they expect that other partners will choose to join in, including local and regional tourism organisations.

STOP PRESS: At its meeting of 10th April 2018, after considering the views of the Geological Survey of NSW (GSNSW), the project Steering Committee decided to abandon plans to nominate for a UNESCO Global Geopark and instead had noted the offer of the GSNSW to assist in developing an alternative geotourism strategy of the region.

Eurodobbala Shire Council Global Geopark Proposal, South Coast, New South Wales

The Standing Committee is currently providing comprehensive advice to this Local Government Authority about how to initiate an assessment of the 'georegional' attributes of their area, with the intention of determining whether or not a UNESCO Global Geopark nomination could be mounted.

Ongoing Discussions with Geoscience Australia - Defining a Geopark Assessment Process for Australia

The Geotourism Standing Committee has been conferring over the past 12 months with the office of the Acting Chief Scientist of Geoscience Australia with the intent of defining an agreed geopark assessment for Australia, having regard to the views of the GWG.

As a response to experiences learnt from the Etheridge project, it has been suggested in discussions with various stakeholders that Australia should adopt a nomenclature which removes reference to the word 'geopark' and focus instead on communicating the concept of a 'georegion' or 'geoprovince.' Discussions at the Asia Pacific Global Geopark Symposium (China, September 2017) were undertaken with geopark representatives from Japan who shared information about how geopark proposals are processed in their country, as a First Stage at a national level, and then move forward in a Second Stage only as UNESCO Global Geopark proposals after they have been assessed by the 'Japanese Geopark Committee'. This Committee comprises representatives of the Japanese National Committee of UNESCO, a relevant national government agency and the Japanese Geoparks Network.

It is recognised that this approach, if applied to the Australian situation, offers the opportunity for proponents using the language of georegions (or the like) to explore various alternative options for geotourism development, including a strong focus on the establishment of geotrails between sites of geological merit as interpretive sites, including robust geoheritage sites, some of which may already have been established as geological 'monuments' or recognised in state or national geoheritage registers. It is recognised that some proposals may even emerge from within the areas previously identified by governments as Australian National Landscapes.

Should a geopark proposal be favoured and have gained both community and State/Territory Government support without the direct linkage with UNESCO, it can then be considered on application as a potentially international project, subject to vetting by an agreed assessing body, then the project could be labelled an Aspiring UNESCO Global Geopark. Should a project not be considered (by the community, governments or by the assessing body) as suitable as an Aspiring UNESCO Global Geopark, it would simply retain the title of a 'Georegion' (or the like).

It should be noted that whilst in Western Australia, work is in progress to establish a geoparks representative body (known as Geoparks WA Inc and with the principal object of 'supporting and promoting the development of Geoparks, Geotourism and Geotrails with a focus in Western Australia'); there is currently no national body in place which performs a similar

function. To date, the Geotourism Standing Committee has avoided taking a leading role within the GSA relating to promoting geoparks because of sensitivities relating to potential impact on exploration and mining. However, it is argued that this sensitivity might be removed if the proposed assessment process was established in which the geological surveys were represented in this process, thus enabling the Standing Committee to take on a more proactive geopark leadership role.

ACHIEVEMENTS OF THE GEOTOURISM STANDING COMMITTEE DURING 2017/2018

1. Continuing Engagement with the Australian National Landscapes Programme and Chinese UNESCO Global Geoparks

Australian National Landscapes

Engagement with the Australian National Landscape Programme has continued.

A number of the Geotourism Standing Committee's members have been actively involved in and have championed the Australian National Landscapes (ANL) Programme because of the opportunity to promote geotourism concepts. The Programme was the first time the tourism sector, nature conservation managers and tourism advocacy organisations had worked closely together to present Australia's top nature tourism experiences. The Programme facilitated coordinated tourism planning and management and provided a focus for international marketing. The Programme was delivered bottom up, with coordinating bodies for each ANL made up of land managers, regional tourism bodies and local government. The system is 'blind' to land tenure boundaries and in that sense, resembles the geopark structure. Three of the ANLs straddle state borders, demonstrating a unique level of cooperative management.

The Australian National Landscapes Programme included the following regions: Australian Alps (New South Wales/Victoria), Australia's Green Cauldron (New South Wales/SE Queensland border region), Great Barrier Reef and Wet Tropics area (Queensland), Australia's Red Centre and Australia's Timeless North (Northern Territory), Australia's Coastal Wilderness (New South Wales/Victoria), the Flinders Ranges and Kangaroo Island (South Australia), the Great Ocean Road (Victoria), the Greater Blue Mountains and Sydney Harbour (New South Wales), the Kimberley, Ningaloo-Shark Bay and Great South West Edge (Western Australia), and Tasmania's Island Heritage.

Unfortunately, in 2014, the two key participating Australian Government agencies advised that they had stepped back from a central coordination role and would instead encourage local steering committees and the tourism industry to further advance this concept. However, in 2017 the peak tourism industry lobby group (Tourism and Transport Forum) has released a white paper extolling the virtues of the ANL programme, a move that can only assist in promoting the development of geotourism. The Standing Committee has made

written representations to this lobbying group with the expectation that the Committee will be engaged in planned workshops to discuss the future development of these Landscape areas for nature-based tourism. In April 2017, the Geotourism Standing Committee arranged for a geotourism feature on the *Kimberleys* National Landscape to be published in the GEOExPro magazine for petroleum geologists around the world

<https://www.geoexpro.com/articles/2017/05/a-wonderful-wild-wilderness>

Other Standing Committee members are directly involved in the former Australian National Landscapes Program. Professor Ross Dowling is the Chair of the Steering Committee for the *Great South West Edge* National Landscape in WA (in which the 2016 SEGRA conference was held in October 2016), and Bruce Leaver plays a key role in the tourism management of *Australia's Coastal Wilderness* Landscape in NSW/Victoria.

Dr Young Ng has been working to promote the Australian National Landscapes as sites to be considered for inclusion in a proposed CCTV documentary filming program now to be undertaken in Australia later in 2018.

Collaboration with the Geological Society of China and Engagement with the China Region

The China connection continues to play a significant role in the work of the Geotourism Standing Committee. On 9th December 2017, a historic Memorandum of Cooperation embracing a 'sister park' arrangement was signed between the Zhijindong Cave UNESCO Global Geopark and the Jenolan Karst Conservation Reserve. The Reserve's Administrator, Bob Conroy, also a member of the GSA Geotourism Standing Committee, executed this agreement during his visit to the spectacular karst landscape in Guizhou Province in south-west China. Mr Conroy has advised that his organisation looks forward to sharing information and management practices, receiving delegations and greater numbers of visitors from China and negotiating possible staff exchanges. Representing the Standing Committee, Bob Conroy and Dr Young Ng also attended the National Meeting of Tourism Earth Science and Geopark Research Sub Committee of the Geological Society of China.

In September 2017, the Chairman of the Geotourism Standing Committee visited China and Taiwan to address to the 5th Asia-Pacific Global Geopark Network Symposium, Zhijindong Cave Global Geopark, Guizhou Province, China, to tour geological attractions of Guizhou Province and meet with government officials, and to deliver a keynote address to the 2017 Taiwan International Geopark Conference in Taipei. Dr Young Ng also attended the China elements of this engagement.

The tour of this incredibly rich karst formation geological province of Guizhou was arranged by the National Commission on Tourism Earth Science and Geopark of the Geological Society of China and hosted by the Bureau of Geology and Mineral Exploration and Development of

Guizhou Province. The visit was led by Professor Anze Chen and Ms Yanjun Yang, the Executive Deputy Secretary General of the National Commission of Tourism Earth Science and Geopark of the Geological Society of China. The tour comprised visits to a number of significant Karst geosites and fossil museums/research centres within the Xingyi and Guanling National Geoparks.

The visit also included detailed discussions with senior governing officials of the City of Xingyi about geopark development, and separately with executive members of the Bureau of Geology and Mineral Exploration and Development of Guizhou Province about potential areas of collaboration between Australia and China. Two areas of interest emerged during the meeting.

Firstly, a collaborative proposal predicated on the following assumptions and approach designed to attract a geotourism-primed Chinese market to consider travel to Far North Queensland Region (including Etheridge Shire). Secondly, interest expressed by the Bureau in a collaboration with the University of Tasmania's 3D Visualisation project.

In a meeting with Professor Anze Chen (the China Side signatory of the Memorandum of Cooperation agreement, various matters were discussed. These included the following opportunities.

- * A proposed collaboration between the Zhijindong Cave and Jenolan Caves to be held in Guizhou Province in early December, and whilst in the Province.
- * A proposed collaboration between the Keichousaurus Conservation Museum of Xingyi National Geopark and the South Australian Museum/SA Government in regard to conservation and display of the Ediacaran Fossil assemblages in the Flinders Ranges.
- * Building on the visit of the Mayor of Warrumbungle in 2016 to Fangshan Global Geopark, arrangements to be made by Warrumbungle Shire to invite a delegation from Yandangshan Global Geopark to visit the Warrumbungle National Park.
- * Building on discussions with USYD in 2016, proposed visit by the Chinese University of Geoscience to discuss with USYD a bilateral program of curricula plans with field visit components.
- * Finalise CCTV filming of significant Australian landscapes (including Far NQ and Etheridge) for late 2018.
- * Invitation to Chinese Geotourism delegation to attend the AGC Convention in Adelaide.
- * Tourism Earth Science Curricula Promotion at AUGEN 2018 (to be included in the AGCC 2018 event).

Following the visit to China, the Standing Committee Chair travelled to Taiwan to deliver a keynote address to the 2017 International Geopark Conference in Taiwan; the topic selected was 'the development and community engagement issues associated with the two Australian Pre-Aspiring UNESCO Global Geoparks'. At this conference, he met delegates from a range of other countries (i.e. Taiwan, Hong Kong, Japan, South Korea, India, Malaysia, Vietnam, Taiwan, UK, Germany, Poland and New Zealand) – all engaged in the promotion of geopark development. In particular, considerable time was spent conferring with the Chief of the Department of Economic Geology - Mineral Materials for the Ministry of Natural Resources and Environment, Vietnam Institute of Geosciences and Mineral Resources. Dr Nguyen is driving Vietnam's Global Geopark development program and intends to visit Australia next year on an exploratory basis to exchange knowledge and experience on the regulatory operating environment for exploration and mining in Australia, in comparison with Vietnamese regulations. Interest was also expressed in promoting cooperation between his agency and Geoscience Australia and Geological Surveys on geological research, especially in the areas of hidden deep mineral resource exploration, and the development of geopark networks in Vietnam and Australia.

Contact in North Asia was also made with researchers in China, Japan and South Korea who expressed some interest in collaborating with Australian researchers in the area of 3D visualisation <http://www.ausgeol.org/> to be used for geosite identification in geotourism, as well as for potential applications in geological hazard mapping in geologically unstable areas of Asia where this need is a core area of interest for government agencies.

2. Conferences/Symposia – Current and Forward Years

2017-2018

South Australia provided two opportunities in 2017 to promote the benefits of geotourism to regional development. With the Australian Geoscience Convention being held in Adelaide in October 2018, a real opportunity has now been created to build momentum for geotourism development.

On 27th November, speaking at the opening of the recent Global Eco conference in Adelaide, the South Australian Minister for Sustainability, Environment & Conservation, the Hon Ian Hunter MLC commented on the potential of geotourism development for South Australia, "Geotourism is (also) an emerging market that South Australia is especially well placed to cater for, with megafauna fossils at the World Heritage Naracoorte Caves, evidence of the world's earliest animals in the Flinders Ranges, and stunning geological formations in parks like the Gawler Ranges, Vulkathunha-Gammon Ranges, and the ice-age gem of Hallett Cove right on Adelaide's doorstep."

Geotourism workshops featured at both the Global Eco conference and the SEGRA 2017 conference held at Port Augusta in late October, with the latter event attended by the Hon Geoff Brock MP, Minister for Regional Development and Minister for Local Government. Following a representation to the Minister at this conference, he subsequently advised that the information documentation made available at the conference, and describing the major industrial corridor through the Upper Spencer Gulf Region, was developed as a tool to highlight infrastructure, agriculture, manufacturing, mining and other industries in an area of economic growth, and to provide a focus for investment opportunity. He agreed that the focus on nature, landscape, heritage and culture as key focal points for tourism development, implies a geotourism approach.

Geotourism has also been reviewed as part of the preparation of the World Heritage nomination for the Flinders Ranges, initiated at the first 'Experts Workshop' held in August 2016. The subsequent Preliminary Statement of Values Report that was prepared is now being subject to geoscience peer review in a follow-up workshop scheduled for February 2018. Information about this project was also presented at SEGRA 2017 by Justin Holmes of the South Australian Department of Environment, Water and Natural Resources.

In October, the Geotourism Standing Committee co-hosted a **Geotourism Workshop at the Sustainable Economic Regional Australia (SEGRA 2017) conference** in Port Augusta, South Australia. The following presentations were featured.

- Marketing Australia's 'Scenic Areas' – Angus M Robinson
- Tourism of Tomorrow: Digital Transformation: Market Insights – Angus M Robinson
- Digital Tourism Development – Longreach Regional Tourism – Kevin Liepins
- Geoheritage, Geotourism and a South Australian Songline – Ian D Lewis
- Benefits of RV Tourism – Richard Barwick
- Flinders Ranges World Heritage Poster – Justin Holmes

The **Geotourism Workshop forming part of the Global Eco Conference of Ecotourism Australia** was held in Adelaide in November 2017 with the following presentations.

- Geotourism, Ecotourism and Regional Development – Challenges and Opportunities – Angus M Robinson
- Chinese Geotourism and Geoparks: selected cases: Dr Young Ng
- Economic Impact of Geotourism and Geoparks in China: Dr Young Ng
- Geoheritage, Geotours, Geotrails and a South Australian Songline – Ian D Lewis and Angus M Robinson
- Driving Rural Recovery with Geotourism in the Wheatbelt of Western Australia – Alan Briggs
- A Beehive Balancing Act for Ecotourism in the Bungle Bungles – Dennis Williamson

- Time travelling in South Australia: developing opportunities for regional fossil tourism and education – Dr Liz Reed, Dr Helen Macdonald, Professor Sandy Steacy
- Bathe the World: creating global connections through natural hot springs – Charles Davidson

2018 – 2019

The Standing Committee will be working with the Geotourism Forum of Ecotourism Australia in co-convening geotourism sessions at **SEGRA 2018** to be held in Mackay, Queensland over the period 22-24 October and at **Global Eco 2018** in Townsville, Queensland over the period 26-28 November.

The Australian Geoscience Council has invited the Standing Committee to convene a Geotourism session at the AGC Convention (**AGCC 2018**) scheduled for 14-18 October 2018. The Geotourism and Geoheritage Sub-theme will explore the interplay between geology and contemporary societal activity such as tourism, nature conservation and stewardship of our natural and industrial heritage. It will consider the impact that digital transformation is having on the ability to understand and visualise our planet. In this way, the sub-theme will explore the past, present and future relationships between people and the rocks beneath their feet.

Also, a Geotourism Preconference Workshop will explain the philosophy of geotourism, economic outcomes, issues of regions, economic benefits versus environment protection. The workshop will also show participants how to develop a 'geotourism story' around interpretation on the holistic nature of geotourism, geotrails and geoparks based on outstanding landscapes and geology, incorporating both biodiversity and cultural characteristics (both post-European settlement and indigenous), as well as maximising the value of incorporating mining heritage (both past and present). Issues relating to seeking government approval and community engagement will also be covered. Insights about the impact of digital transformation including development of smartphone applications, website and visitor centre enhancements will also be shared.

The Standing Committee has been working closely with Dr Ian Percival of the **Linnean Society of NSW** for a planned natural heritage symposia (25-26 September, 2018) to be in Coonabarabran, NSW to focus on any aspect of the **natural history of the Warrumbungle National Park, Mount Kaputar National Park, and related areas of Miocene-age volcanic activity in Northwest NSW**, specifically on (1) regional geology and geophysics, (2) palaeontology, (3) geomorphology and soils, (4) floral and faunal species (particularly native plants and animals), their distribution and ecology, and (5) the effects on the biota of the recent fires in 2013 and the subsequent recovery of plant and animal communities. Talks on the geoheritage and biodiversity significance of the volcanic features, and the geotourism potential of the region, are also expected.

Geotourism Standing Committee members represent key speakers at an **International Workshop focused on the business of geotourism and geoparks** to be held in Perth, Western Australia on the 14th of May 2018. Whilst in Perth, the Standing Committee Chair is scheduled to address the Western Australian Division on the benefits of geotourism.

A number of Standing Committee members are scheduled to represent Australia at the **8th International Conference on UNESCO Global Geoparks 2018** to be held at the Adamello-Brenta UNESCO Global Geopark, Trentino, Italy in September.

3. Achievements of the State/Territory Based Geotourism Sub Committees

South Australian Geotourism Sub-Committee - Ian D Lewis, Chair

The SA Geotourism Subcommittee met several times during 2017, usually on Level 7, 101 Grenfell St near the Geological Survey of South Australia and we acknowledge the generous permission given for use of those rooms. Our able Chairperson for the year, retiring at the end of 2017, was Associate Professor Graziella Caprarelli and we thank her for her enthusiastic leadership.

Committee members share a common interest across geotourism, geoheritage, field guides and maps, with several members belonging to other like-minded GSA subcommittees. Meetings examined brochures and maps of geotrails, promotional initiatives for geotourism and excellent Geopark literature from Europe (provided by Professor Pat James from several overseas trips).

The 'nature tourism' movement has been developing in various parts of Australia, including South Australia, for several years and together with 'ecotourism', both approaches are now recognising the important 'framework' role of geotourism and its contribution to understanding and increased awareness of landscape values. This is a positive development that has the potential to increase the value of the work of our GSA members in several of our subcommittees.

Geotourism also boosted its profile through presentations from our subcommittee to two conferences in South Australia last year - the SEGRA (Sustainable Economic Growth for Regional Australia) conference in Port Augusta (an annual regional development conference moving between States) and the GlobalEco Conference in Adelaide in November. At both events, dedicated geotourism seminars were held, covering such topics as development initiatives for the Flinders Ranges, geotourism progress and perspectives in other States, fossil tourism, developments from overseas (particularly China) , and one fascinating presentation from Victoria about 'Hot Spring' Geotourism based around travelling to spa sites in Australia and elsewhere. This indicates the wide range of interests in the field of geotourism.

During the year, the Fitzgerald Bay Stranded Shingle Ridge just north of Whyalla in Upper Spencer Gulf was listed on the State Heritage list as part of a strategy to increase the some 150

'natural' heritage sites to balance the some 2000 'built' heritage sites. Many thanks to Associate Professor Vic Gostin for his assistance to the Chair in preparing and refining this submission.

At the GSSA Discovery Day in December, Dr Carmen Krapf unveiled her new on-line Geotrail of Gawler Range rock samples - Discovery Trails: The Rocks of the southern margin of the Gawler Range Province – from basement to cover - December 2017 - Carmen B E Krapf and Christie Gerrard. This discovery trail features rock samples that were collected during the Mineral Systems Drilling Program (MSDP) along the southern margin of the Gawler Ranges spanning from the basement to the Gawler Range Volcanic Province through to its cover. The trail can be viewed at: <https://discoverytrails.sarig.sa.gov.au/story/3> Congratulations are extended to Carmen and Christie for this initiative.

Tasmanian Geotourism Sub Committee - Michael Vicary, Chair

The Tasmanian Geotourism Sub Committee was established in April 2017 and currently has about 12 members. The major project has focused on the continued development of the West Coast Geotrail in collaboration with Mineral Resources Tasmania and the West Coast Council. Two additional interpretive signs have been produced for the Lake Burbury and Trial Harbour Geosites. Other activities include:

- A GSA monthly meeting focusing on issues faced by Geotourism in Tasmania
- A presentation by Keith Corbett for the GSA/AUSIMM Geoscience conference in Strahan.
- Assisted in the development of and testing of the Australian Geology Travel Maps android application.
- Ongoing discussions about the production of a Tasmanian Geotourism map/application.
- Discussions with Dale Williams about the development of a Geotrail on Flinders Island.
- Discussions with the Glebe Hill Landcare Group about potential geological signage in a reserve near Hobart.
- Conducted an excursion highlighting aspects of the local geology as part of the Lost Rocks Art and Literature Exhibition at the Rosny Farm.
- Conducted an excursion to Mount Wellington for Scotch Oakburn School students.
- Local promotion through several Gem and Mineral Fairs.

New South Wales Geotourism Sub Committee - Dr Boyd B Dent, Chair

In February 2018, the NSW Division formed the Geotourism Sub-Committee with Boyd Dent as inaugural Convenor; and at the same time appointed him to the NSW Divisional Committee.

On initial analysis, the role at the NSW level is initially to focus on the concepts of geotrails, linkages to geotourism sites and encouragement for the development of these. Internationally recognised geoparks are an issue more appropriately handled at the Standing Committee level, until hands-on local involvement is required. Attracting funding to support various activities, teasing-out existing documentation of relevance and putting it together will be an early endeavour. Opening up lines of communication to communities (including Local Government) and organisations to assist in geotourism activities will follow.

What has become immediately apparent is the close relationship in many instances between geoheritage sites and values and associated geotourism opportunities. These cannot be ignored at the ground – operational level: one informs the other. It is intended to closely build on this. The effect can be seen readily in the big-picture Geotourism Map; e.g. is The Three Sisters – a geological erosion remnant – a tourism lookout – an iconic component of a National Heritage Site – a cultural feature – or just a bunch of slightly tilted sedimentary rocks (that happen to be at the head of Sydney’s largest drinking water catchment)?

The development of the second edition of the NSW Geotourism Map in conjunction with Cartoscope, is being ably managed by Standing Committee member Dave Robson, and is a high priority matter. A budget allocation from NSW Division is being sought to assist with this project, with the substantial sponsorship of the Australian Geoscience Council for Edition 2 being acknowledged with much appreciation. Other significant \$5,000 contributions have been gratefully received from the Sydney Mineral Exploration Discussion Group (SMEDG) and the AIG.

The year is expected to develop along the following path/time allocation: 3 months – familiarisation; 4-9 months resource development with a view to (i) a Sydney ‘old area’ geotrails concept; (ii) a paper for AGCC 2018 in Adelaide; (iii) possible notes for Mackay SEGRA; (iv) engagement with the Hunter Valley Branch; (v) the Geotourism Map and existing known endeavours as they emerge e.g. Eurobodalla, Port Macquarie and Warrumbungles.

Some guiding thoughts have been developed for this early period:

1. Empowering local geoscientists (regional-, site-, city- based) to be informal ambassadors for geotourism. When they talk to, or participate in activities with, friends, family, neighbours, colleagues, professional or community groups. As and when a situation arises, a knowledgeable geoscientist could for instance say ... “have you seen/visited “ in non-threatening conversations and then proceed to mention or more deeply discuss a geological phenomenon.
2. Development of sprouted seeds, saplings and low-hanging fruit. There’s a need to not let slip away initiatives to-hand, because they are most likely to have the potential to be fulfilled. For this reason, existing endeavours will initially receive proportionally more support than new ones.

3. Spreading the word with existing tools. An initiative to be researched and hopefully trialled is to make contact with conference and tour organisers of different disciplines and interests. If we are able to cheaply add-in geotourism reference material in travel and out-of-conference ideas packs, this might bring some benefit and reinforcement.

4. Sydney's 'old area' geotrail. How many visitors (let alone 'locals') recognise the rich maritime and geological history of Australia's first settlement as they wander the various parts of Sydney? GSA previously developed ideas leading to the "Rocks Walk", so part of the concept is not new. It is considered that there is much to build on in geotourism terms from Haymarket to Potts Point around the shoreline and over the ridges. It is proposed to develop reworked entity materials of all kinds and craft "Sydney Geo-Site" (for want of another term at present) – trails and walks to inform and educate. Aspects may be further developed by professionally hosted tours etc.

Dave Robson, in association with Dr Kelsie Dadd, has been facilitating a collaborative venture being directed by Centennial Parklands (and involving the three major botanical gardens in Sydney) aimed at developing a Sydney Basin Geotrail. So far Dr Dadd has convened an annual interpretative display (as part of the National Science Week program) at the Mt Annan Botanical Gardens and Centennial Parklands and has scheduled an additional display at the Blue Mountains Botanical Gardens at Mt Tomah in the 2018 program.

Victoria

Whilst a Sub Committee is yet to be established in Victoria, Associate Professor Bernie Joyce has commenced discussions with colleagues with this concept in mind. Bernie has kept the Standing Committee informed of land use conflict developments impacting on significant geosites at Harman's Valley and Warrnambool in Western Victoria and Mt Macedon, just west of Melbourne.

Other States

It is also hoped that as a result of continuing discussions held with representatives of the West Australia Division and the AIG, a higher level of focus will be directed at assisting in promoting geotourism development in both Western Australia and Queensland. The establishment by the AIG of the John Forrest National Park Geotrail in Western Australia being ably championed by Standing Committee Member, Mike Freeman is acknowledged as a significant achievement.

4. Geotrail Proposals

With input from the Geotourism Standing Committee, active proposals are continuing to be being implemented or considered by various government agencies and/or university groups in Western Australia (Murchison, Geraldton), Tasmania (West Coast Living Earth GeoTrail),

Queensland (Brisbane Valley Rail Trail, Dig the Tropics, Boulder Opal), New South Wales (Port Macquarie), South Australia (various projects), Victoria (Kanawinka/Great Ocean Road area), and Western Australia (John Forrest Geotrail).

5. Publicity and Promotion

As a result of inspired support from the GSA Governing Council, a key feature of the GSA's new web site is the continuing development of a new 'public' portal focusing on geotourism <http://bit.ly/2irGlem>

Membership of the LinkedIn Discussion group '**Australian Geotourism Development**' now totals 342 members and continues to grow at a rate of some 20% per annum.

A repository for the posting of geotourism industry information is also available at <http://www.leisuresolutions.com.au/index.php/geotourism-industry-groups/>

Regular articles promoting geotourism continue to appear in the publications of the GSA (i.e. The Australian Geologist), the AIG and The AusIMM, whenever the opportunity arises.

Two ABC Radio interviews were conducted during the year – one interview focusing on an announcement by the Eurobodalla Shire Council about interest in investigating the nomination of a UNESCO Global Geopark, and the other interview in relationship to interest in the Georgetown Inlier geological history and geotourism generally in Far North Queensland.

Angus M Robinson FAusIMM (CP)

Chair, Geotourism Standing Committee and Designated Spokesperson on Geotourism for the Australian Geotourism Council

1st May 2018

2018-2019

2018/2019 Annual Report of the Geotourism Standing Committee of the Geological Society of Australia (GSA), for Period Ending 31 March 2019

THE GEOTOURISM STANDING COMMITTEE

- Chair - Angus M Robinson[#], Managing Partner, Leisure Solutions[®], New South Wales (1 April 2018 to 19 November 2018)
- Mark Asendorf, Marmel Enterprises, Northern Territory
- Alan Briggs, PhD candidate, Murdoch University, Western Australia
- Bob Conroy, Administrator, Jenolan Caves Reserve Trust, New South Wales
- Professor Ross Dowling OAM, Honorary Professor of Tourism, School of Business & Law, Edith Cowan University, Western Australia
- Mike Freeman (linkage with the AIG), Western Australia
- A/Professor Bernie Joyce, Earth Sciences School, The University of Melbourne, Victoria
- Bruce Leaver AM, Chair, Greater Blue Mountains WHA Advisory Committee, NSW (1 April to 7 November 2018)
- Ian Lewis, Honorary Director, Kanawinka Volcanic Geotrails, Victoria/South Australia
- Dr Young Ng, Association for Geoconservation, Hong Kong
- Dr Ian Percival, representing the Geological Heritage Standing Committee (1 April 2018 to 14 December 2018)
- Dave Robson, Associate, Leisure Solutions[®], New South Wales
- Geoff Sharrock, linkage with The AusIMM (1 April 2018 to 13 November 2018)
- Michael Vicary, Mineral Resources Tasmania, Tasmania
- Monica Yeung, Gondwana Dreaming, ACT

Expert Spokesperson on Geotourism for the Australian Geoscience Council

The Geotourism Standing Committee (GSC) met formally by teleconference on three occasions during the year with members particularly active during this year in the areas of policy and advocacy, symposia, and seminars, and geopark and geotrail development. An informal gathering of some members was also held at AGCC in October.

The GSC notes with much appreciation the outstanding service of retiring member, Bruce Leaver AM as a longstanding member of the GSA Geotourism interest groups dating back to 2011. The support and commitment of other retiring members, Dr Ian Percival, and Geoff Sharrock, representing the interests of the Geological Heritage Committee and The AusIMM respectively, is also acknowledged with many thanks.

HIGHLIGHTS

- A continued uptake in awareness building of the opportunities offered through geotourism through the organisation of a geotourism session and workshop at the AGCC conference in Adelaide and various workshops at conferences held, in Perth WA, Mackay and Roma Qld, and Coonabarabran NSW.
- Continuing discussions with Geoscience Australia in regard to furthering the development of geotrails and geoparks in Australia through development of a proposed 'georegional' assessment process for formative geopark development (now being adopted in Western Australia) but considered as a topic to be discussed as part of an AGC endorsed, draft National Geotourism Strategy.
- Ongoing work in briefing government agencies and other interested parties about geotourism, geotrails and geoparks, <https://bit.ly/2A3tTHR>
- Publication and launch of the Second Edition of the NSW Geotourism map.
- The proposed formal establishment of a Geotourism Sub Committee in Western Australia.
- The emergence of proposed new geotrail projects in New South Wales, Queensland, Western Australia, Tasmania, and Norfolk Island.
- Agreement obtained from AJES for the GSC to coordinate a special GSA publication on geotourism.

GEPARK DEVELOPMENT IN AUSTRALIA

Discussions with Geoscience Australia

Since December 2017, discussions have been undertaken with Dr Adam Lewis (then Acting Chief Geoscientist) of Geoscience Australia (GA) with the objective of developing a new two stage process for considering geopark nominations based on a process successfully adopted in Japan; the first stage to involve an extensive assessment of areas (i.e. georegions) identified as being of geological significance. In June, the GSC sought approval of the Governing Council of the GSA to consider a process for firstly assessing and then seeking government and community support for the concept of UNESCO Global Geoparks establishment in Australia, within a proposed framework of a National Geotourism Strategy to be developed for consideration by the Australian and State/Territory Governments under the current COAG arrangements. In response, the then President of the GSA, Dr Caroline Tiddy, advised that the Executive Committee of the Governing Council had discussed this proposal and believes that Geoscience Australia (GA) should be taking the lead in organising the forum, given their idea of developing a National Geotourism Strategy. The President also advised that as a member-driven organisation, the GSA is not in a position to develop such a strategy. Instead, Dr Tiddy argued that the GSA role should be, through advice from the GSC, to provide information and advice towards strategy.

However, by the end of July 2018, GA had formed the view that it has no activity around a national geotourism strategy and had no intention of developing such a strategy at this time. Instead, it was suggested that any such strategy could be developed by the GSA under the GSC's terms of reference, because such a strategy would help to remove some of the confusion that exists around the 'why' of geoparks. As a means of progressing this matter, given conflicting views about how a national strategy could be developed, in a report to the GSA Governing Council meeting of 22nd August, it was suggested instead that of the available options to be discussed is that such a role could be initiated by the Government Geoscience Working Group (GWG) in association with the AGC.

During the course of the AGCC, this issue was canvassed in various conversations with the leadership of GA and AGC, as well as with Dr Chris Yeats, Immediate Past Chairman of the GWG. Given that AGC's Strategic Plan <http://www.agc.org.au/resources/agc-strategic-plan-2015-2020/> under the pillar of 'geoscience advocacy' actually identifies the pursuit of geotourism, the response of working towards the development of a national geotourism strategy was strongly supported by these leaders.

UNESCO Global Geoparks

Geotourism attractions are now being developed around the world primarily as a sustainable development tool to support the economic development of local and regional communities. A major vehicle for such development is through the concept of 'geoparks.' A geopark is a unified area with geological heritage of international significance and where that heritage is being used to promote the sustainable development of the local communities who live there.

Geoparks can evolve through a series of levels from 'pre-aspiring,' 'aspiring,' 'national,' 'regional' (e.g., European or AsiaV-Pacific Regions) to 'global.' There are now hundreds of geoparks around the world. Support to individual geoparks is offered through the Global Geoparks Network Bureau. The original target of the Global Geoparks Network was to establish 500 geoparks around the world. The number is growing at a rate of about 10 new global geoparks per year.

As of 17th April 2018, UNESCO has announced a further 13 geological sites in Asia (China, Indonesia, Vietnam, Thailand, Japan, and South Korea, Europe, Africa, and Canada) have become UNESCO Global Geoparks, therefore increasing the global total to 140 within 38 countries. China has increased its total to 37 global sites.

On 21st February 2019, the 4th open session of the International Geoparks Programme took place in Paris and determined that the new aspiring Geopark applications for the UNESCO Global Geoparks to be evaluated during 2019 are:

New applications:

1. Belitong, Indonesia
2. Bohol, Philippines

3. Cliffs of Fundy, Canada
4. Dak Nong, Vietnam
5. Discovery, Canada
6. Granada, Spain
7. Hantangang River, Republic of Korea
8. Kula-Salihli, Turkey (Extension)
9. Lauhanvuori-Haemeen kangas, Finland
10. Maestrazgo, Spain
11. Majella, Italy
12. Waitaki Whitestone, New Zealand
13. Xiangxi, China
14. Zhangye, China

Extension Requests:

1. Dunhuang, China
2. Haute Provence, France
3. Troodos, Cyprus
4. Zinjindong Cave, China.

Pre-Aspiring UNESCO Global Geopark proposals have been those projects in Australia undergoing assessment to obtain community and government support prior to any application being lodged with UNESCO.

The process of developing a Pre-Aspiring UNESCO Global Geopark involves an ‘on ground’ assessment of the feasibility of any proposal brought forward by any grouping including government agencies. With compelling regional development imperatives in mind, two such proposals, the Etheridge region of Far North Queensland (some 40,000 square kilometres in area) embracing the entire Shire of Etheridge and the Warrumbungle region embracing three Local Government Areas - Warrumbungle, Gilgandra, and Coonamble located in Northwest NSW (some 27,000 square kilometres in area) have been subject to intensive assessment during 2017 and 2018, following advice submitted to the Secretary General of the Australian National Commission of UNESCO advising that the ‘pre-aspiring’ nomination process had commenced. Progress achieved for these projects was reported to at the 5th Asia Pacific Global Geopark Network Symposium held in China in September 2017.

In response to a well-orchestrated campaign by graziers to stop the project, the proponent, Etheridge Shire Council, decided in 2017 not to proceed with a UNESCO application and instead has been exploring an alternative Geotourism Development Strategy for the Etheridge Scenic Area.

The Geoscience/ Mineral Heritage Reference Group (chaired by Ian Withnall) has been meeting throughout the year to discuss several project proposals for realisation of the Etheridge geotourism strategy that will explore the opportunity of developing a pilot geotrail project for participating graziers and assisting the Ewamian Aboriginal Corporation in developing the

Talaroo Hot Springs site. In addition, Etheridge Shire Council has expressed interest in redevelopment of the TerrEstrial Visitor Centre with new displays, establishing interpretive signage at Copperfield Gorge at Einasleigh, and assessing the potential of establishing a Geological Time Walk at Georgetown. <http://bit.ly/2BfAnC2>.

Warrumbungle Pre-Aspiring UNESCO Global Geopark

At its last meeting on 10th April 2018, after considering the views of the Geological Survey of NSW (GSNSW) facilitated by the Chair of the GSC, the project Steering Committee decided to abandon plans to nominate for a UNESCO Global Geopark, and instead, accept the offer of the GSNSW to assist in developing an alternative geotourism strategy for the region, that would include the development of a major volcanic province geotrail supported by a brochure, website and smart phone application.

Eurodobballa Shire Council Global Geopark Proposal, South Coast, New South Wales

The Chair of the GSC briefed Eurodobballa Shire Council on 5th June 2018 about the current situation relating to geotourism development, and the concept of looking first at a ‘Georegion’ assessment was well received. A general briefing document has been prepared for public dissemination <https://bit.ly/2A3tTHR>

Maintenance of Global Geopark Linkages

GSC members Alan Briggs and Dr Young Ng, accompanied by Professor Patrick James of the South Australian Geotourism Sub Committee, represented Australia at the **8th International Conference on UNESCO Global Geoparks 2018** held at the Adamello-Brenta UNESCO Global Geopark, Trentino, Italy in September; Dr Young delivering a presentation titled: ‘When geoscientists meet painters; interpreting natural landscape in Danxiashan Global Geopark of China’.

ACHIEVEMENTS OF THE GEOTOURISM STANDING COMMITTEE DURING 2018/2019

1. Continuing Engagement with the Australian National Landscapes Programme and Chinese UNESCO Global Geoparks

Australian National Landscapes

Engagement with matters relating to the discontinued Australian National Landscape Programme has continued, with a particular focus this year through representation by GSC members on the Flinders Ranges World Heritage Expert Group.

Collaboration with the Geological Society of China and Engagement with the Greater China Region

Based on a meeting with Professor Anze Chen (the China Side signatory of the Memorandum of Cooperation agreement in September 2017, work during 2018 has focused on

- Building on discussions with USYD in 2016, proposed visit by the Chinese University of Geoscience to discuss with USYD a bilateral program of curricula plans with field visit components.
- Finalising CCTV filming of significant Australian landscapes.
- Facilitating discussions between Guizhou Province and the Cairns Regional Council to establish a bi-lateral regional relationship.
- Fostering dialogue between the Chair of the National Rock Garden and the Director of the Geological Museum of China in Beijing; it is understood that the Chinese Side has already started to formulate some ideas about how a bi-lateral collaboration might be undertaken.

In addition, considerable time was spent by the Chair of the GSC in organising for Dr Nguyen (Chief of the Department of Economic Geology - Mineral Materials for the Ministry of Natural Resources and Environment, Vietnam Institute of Geosciences and Mineral Resources) a tour to meet Geoscience Australia and Geological Surveys on geological research, especially in the areas of hidden deep mineral resource exploration, and the development of geopark networks in Vietnam and Australia. However, this tour was cancelled to be rescheduled as part of a Prime Minister-led delegation at some future time.

2. Conferences/Symposia

GSC members represented key speakers at an International Workshop focused on the 'Business of Geotourism and Geoparks' held in Perth on the 14th of May 2018. Whilst in Perth, the GSC Chair addressed members of the GSA Western Australian Division on the benefits of geotourism.

In late September, geoscientists were amongst a large grouping of natural heritage specialists who met in Coonabarabran to attend the 2018 Linnean Society of NSW 'Natural History Field Symposium', with the theme of 'Volcanoes of northwest New South Wales: exploring relationships among geology, flora, fauna and fire'. This event was splendidly organised by one of its Councillors, Dr Ian Percival, who also serves as a member of the GSC as a representative of the Geological Heritage Standing Committee. One of the speakers at the Symposium, Simone Meakin, Manager, Publications & Outreach of the Geological Survey of NSW discussed the topic, Geotales and Geotrails: Collaborative geotourism initiatives and implications for the Warrumbungles Region.' Simone was able to point out that the development of the Port Macquarie Coastal Geotrail was inspired by the Linnean Society of New South Wales Field Symposium on 'Geotourism, Geodiversity and Geoheritage in Australia ' that was convened in

Port Macquarie in September 2010, involving initially geologists of both the Geological Survey of NSW and the Geological Society of Australia.

The AGCC 2018 event in Adelaide in October delivered several activities to whet the appetite of geoscientist delegates. The pre-conference workshop co-convened by Professor Ross Dowling OAM and the Chair included supporting presentations by South Australian Geotourism Sub Committee representatives, Ian D Lewis, and Professor Patrick James, with additional contributions from Bronwyn Witham and Lauren Swann. Topics discussed included geotrail development, mining heritage, developments in Canada, and the rationale for seeking support for the establishment of a national geotourism strategy. Delegates were also delighted to receive an impromptu presentation from renowned geoscience communicator, Professor Iain Stewart, who was attending AGCC as one of the invited keynote speakers.

On the second day of the conference, GSA President Caroline Tiddy conceived and organised a full day plenary session that included a series of contributions based on the theme of 'Big Issues and Ideas.' This included in the 'geoscience education and new modes of communication' segment, a keynote presentation by Professor Ross Dowling OAM on interpreting geology for non-specialists through geotourism.

Geotourism was revisited again on the following day through two well attended sessions, featuring firstly a most informative keynote address about the development of geoparks and geotourism based on the experience in Malaysia and the Asia Pacific Region delivered by Professor Emeritus Dr Ibrahim Komoo, the Senior Vice President of the Global Geopark Network and formerly President of the Geological Society of Malaysia.

Dr Ron Boyd from Newcastle University provided an overview of the recently completed Port Macquarie Coastal Geotrail in NSW. Presentations from GSC members Ross Dowling ('essential elements of geotourism interpretation'), Alan Briggs ('findings from a study of aboriginal cultural association with geosites and geotourism in the Gunduwa Conservation Region of WA'), Ian D Lewis ('developing geotrains for a large continent'), Ken Moule ('geotourism and the digital age') and the GSC Chair ('opportunities for geotourism development in Australia'), were supported by Patrick James ('virtual reality making outback and armchair geotourism real in SA'), Bronwyn Witham ('what do non-geologists think of geotourism'), and Lauren Swann ('discovering geological stories in every postcode through online, self-guided field trips').

The GSC Chair convened geotourism sessions at **SEGRA 2018** held in Mackay, Queensland over the period 22-24 October. Presentations embraced the following topics.

- Engaging with the Greater China Region: Case Studies from Taiwan and China.
- Self-drive and Geotourism: Outback Queensland Tourism.
- A New Approval Process for Major Geotourism Projects Under Review.
- Growing Our Regions Using Place-Based Approach to Workshop Development.

On 2nd November, in Roma, at the Qld Outback Queensland Tourism Association Awards and Symposium, the Chair delivered a presentation on 'Geotourism Developments in Australia'.

All presentations delivered at the above-mentioned events, at which geotourism was promoted, are available for download from

<https://www.leisuresolutions.com.au/geotourism-industry-groups/>

In August 2019, SEGRA will be held at Barooga in the NSW Riverina and arrangements are being made by the GSC for the Geotourism Spotlight Session to be coordinated by the GSNSW with a focus on 'public geoscience' outreach, of which geotourism is a key component.

3. Achievements of the State/Territory Based Geotourism Sub Committees

South Australian Geotourism Sub-Committee - Ian D Lewis, Chair

In the opening address to the Global Eco conference in Adelaide in November 2017, the then South Australian Minister of Environment, Water and Natural Resources, the Hon Ian Hunter MLC stated:

"Geotourism is (also) an emerging market that South Australia is especially well placed to cater for, with megafauna fossils at the World Heritage Naracoorte Caves, evidence of the world's earliest animals in the Flinders Ranges, and stunning geological formations in parks like the Gawler Ranges, Vulkathunha-Gammon Ranges, and the ice-age gem of Hallett Cove right on Adelaide's doorstep."

Since that time, the State Government changed hands from Labor to Liberal, but the incoming Minister has reaffirmed the Government's enthusiasm and commitment towards these aims, broadly and in support of the Department's efforts in this area.

Preparations are being made for the celebrations of the 50th anniversary of the discovery of the amazing Pleistocene megafauna fossils in the Naracoorte Caves, which were also the subject of a State Heritage registration to include many caves and features which surround the two specified World Heritage sites. This promotes the area more widely and protects its broader cave and scientific assets. It has been said by cave managers and karst environmentalists that geotourism itself has been a fundamental aspect of show caves for well over a century! In conjunction with the 50th, the Australian Cave and Karst Management Association is planning a special three-day intensive geo-appreciation course for Naracoorte and interstate Cave Guides to raise the appreciation of the geological setting of these features, and even more importantly to 'translate' the geo- and palaeo-science to the public, enhancing the values of geotourism.

The proposed serial listing of six important geosites in the central and northern Flinders Ranges is proceeding apace with the strong support of the South Australian Government. A series of 'Experts' meetings have been held to prepare a substantial Technical Report focusing on several proposed World Heritage themes – the ancient pre-life continents, the dawn of life in early oceans, the Ediacaran Period identified by eminent geologist Dr Reg Sprigg AO, and now an geological epoch in its own right, the explosion of life after several "Snowball Earth' ice ages and possible aided by the massive Acraman Meteor impact in the Cambrian, and textbook geological features dramatically exposed all through the ranges, exemplified by Wilpena Pound, the Arkaroola ranges complex (documented originally by Sir Douglas Mawson) and the 40 kilometre Brachina Gorge Geotrail, excellently signposted by the South Australian Geological Survey and the GSA working together.

Hallett Cove is now the subject of a grand proposal to develop a serial –site urban National Park involving several other riverside reserves, historical sites, opening the Happy Valley Reservoir to the public and Hallett Cove itself and its neighbouring Merino Coastal Park, all to be collectively known as the Glenthorne National Park. This is a combination of geosites with cultural and natural components, involving many local communities in an approach which mirrors the aspirations and objectives of UNESCO Geoparks found overseas.

The encouragement to develop geotrails to link such multiple sites is commencing within the South Australian Geotourism Subcommittee, with private examples constructed by the Nature Conservation and the Nature Foundation at Hiltaba in the Gawler Ranges and at Witchelina beyond the northern Flinders Range. Similar concepts are being scoped to link the six northern Flinders Ranges proposed World Heritage sites. Smaller but significant Geotrail ideas are being developed to enhance the newly opened Kangaroo Island Walking Trail (western end of the island) and volcanic and karst sites around the Mount Gambier volcanic complex, where upgrading of interpretive geo-signs for the visiting public has just been completed by the local City Council.

During the year, National Geographic filmed part of a nature documentary on the Blue Lake and volcanic craters of Mount Gambier and the clearwater sinkholes of this extensive karst. The BBC programme 'Coast' with Neil Oliver filmed the natural landscapes and spectacular coastal geology of western Eyre Peninsula and the Nullarbor Plains and Cliffs. Both events involved strong input from the South Australian Geotourism subcommittee representation. International attention on South Australia's outstanding Geosites has been very welcome.

The South Australian Geotourism, Geoheritage and Field Guide Subcommittees have some overlapping memberships, and the foci of each subcommittee contribute to ideas and concepts of the others, enhancing the broad field of Geotourism in South Australia going forward.

Tasmanian Geotourism Sub Committee - Michael Vicary, Chair

The Tasmanian Geotourism Sub Committee was established in April 2017 and currently has some 12 members. The major project has focused on the continued development of the West

Coast Geotrail in collaboration with Mineral Resources Tasmania and the West Coast Council. Two additional interpretive signs have been produced for the Lake Burbury and Trial Harbour Geosites. Other activities include:

- Development 10 interpretation panels for the Furneaux Islands Geotrail.
- Contributed to an interpretation Panel for the Glebe Hill Landcare Group.
- Provided geological descriptions and photos for the Cradle Coast geosite webpage
- Ongoing discussions about the production of a Tasmanian Geotourism map/application.
- Local promotion through several Gem and Mineral Fairs.

New South Wales Geotourism Sub Committee

Since May 2018, the Chair of the NSW Geotourism Sub-Committee has been vacant as a result of the resignation of inaugural Chair Dr Boyd Dent.

In his absence Dave Robson, in association with Dr Kelsie Dadd, has been facilitating a collaborative venture being directed by Centennial Parklands (and involving the three major botanical gardens in Sydney) aimed at developing a Sydney Basin Geotrail. So far Dr Dadd has convened an annual interpretative display (as part of the National Science Week program) at the Mt Annan Botanical Gardens and Centennial Parklands and organised an additional display at the Blue Mountains Botanical Gardens at Mt Tomah in the 2018 program.

Other State/Territory Based Activities

New South Wales Geotourism Map

A highlight of the AGCC was the launch by Dr Chris Yeats, Executive Director of the Geological Survey of NSW of the second edition of the NSW Geotourism Map. The publication of this map by Cartoscope Pty Ltd was made possible by the generous major sponsorship by the NRMA, the AGC, the NSW Government (through the auspices of the Geological Survey), the Australian Institute of Geoscientists, the Sydney Mineral Exploration Discussion Group (SMEDG), and McElroy Bryan and Associates. Other sponsors included the Geological Society of Australia, the Geological Society of Australia (NSW Division), Leisure Solutions®, National Parks and Wildlife Service of NSW, Careys Cave, Age & Fishes Museum, as well as 12 local government organisations.

120,000 copies of this map are being distributed throughout visitor information centres, schools, and the NRMA. The long-standing efforts of GSC member David Robson in ensuring the success of this project is acknowledged with much appreciation. The additional support of the AGC in distributing copies of the map at AGCC has been most helpful in raising awareness of this initiative amongst attending geoscientists.

Queensland

A geotourism workshop at SEGRA 2018 in MacKay in late October and the Outback Queensland Tourism Association Conference in Roma has focused on self-drive geotrail development in Western Queensland and with a small grouping of technology specialists (under the guidance of GSC member Ken Moule) agreeing to work together to review an opportunity for developing an integrated digital platform (utilising smartphone, 3D visualisation and augmented reality technologies) for enhanced geotrail and visitor interpretation centre interpretation.

Western Australia

There has been continuous activity in Western Australia (WA) with the incorporation of Geoparks WA and interaction with the GSA WA branch in discussions about establishing a GSA Geotourism Subcommittee.

A submission has been made to the GSA Western Australia Division to formally establish a Geotourism Subcommittee. This will be followed up later this year.

Geoparks WA

It should be noted that work is continuing to progress to establish a geoparks representative body (known as Geoparks WA Inc and with the principal object of 'supporting and promoting the development of geoparks, geotourism and geotrails with a focus in Western Australia'); there is currently no national body in place which performs a similar function. Members of Geoparks WA also include members of the proposed WA Geotourism Sub Committee.

The Murchison Development Commission and seven shire councils in WA have publicly announced that they are now supporting the concept of a 'Georegion' assessment with an initial focus on major geotrail development.

It is noted that the Western Australian 'State Planning Strategy 2050' seeks to promote Rottnest Island as a geopark. Rottnest Island has engaged Geoparks WA to develop a submission to its board in 2019.

Geoparks WA has been working with several local government authorities in pre-aspiring geoparks in assisting with processes and establishing profiles across the State. The Murchison and Wheatbelt regions continue to develop as 'georegions' with a focus initially on establishing geotrails. In the northern Perth metropolitan region discussions are under way in consideration of a geopark focusing on the karst topography around Yanchep.

<https://www.slideshare.net/leisuresolutions/geoparks-initiatives-in-western-australia-alan-briggs>
<https://www.slideshare.net/leisuresolutions/geoparks-initiatives-in-western-australia-alan-briggs>

It is noted that in May, Geoparks WA and FACET co-hosted an international workshop on the 'Business of Geotourism and Geoparks.' Later in the year, a Geoparks WA workshop showcased the connections people and communities have with the landscape. International, regional, and local speakers presented their connections and views. The workshop was designed to establish a way forward for Geoparks in Western Australia.

Victoria

Whilst a Geotourism Sub Committee is yet to be established in Victoria, Associate Professor Bernie Joyce has continued discussions with colleagues with this concept in mind. Bernie has kept the Standing Committee informed of land use conflict developments impacting on significant geosites at Harman's Valley and Warrnambool in Western Victoria and Mt Macedon, just west of Melbourne.

4. Geotrail Developments

Inspired by the feasibility studies for the Living Earth project undertaken in Tasmania in 2013, the GSC decided to promote the concept of geotrails at the SEGRA 2015 conference at Bathurst, NSW. The presentation <https://www.slideshare.net/leisuresolutions/segra2015-geotourism-angusmrobinson> offered a new definition for geotrails modelled on the GSA definition of geotourism and illustrated how the Red Centre Way in the Northern Territory could also be developed as a major geotrail. A presentation by GC Member Ian D Lewis introduced the concept of the discontinued Kanawinka Global Geopark being developed instead as a series of linked geotrails as well as illustrating the way in which Canada has developed the concept on a national basis.

The GSC was able to provide early advice about geotrail concepts to the developers of the Port Macquarie Coastal Geotrail that was finally launched in May 2018.

With input from the GSC, active geotrails proposals are continuing to be being implemented or considered by various government agencies and/or university groups in Western Australia (Murchison, Geraldton , and John Forrest and Meckering Geotrails), Tasmania (West Coast Living Earth GeoTrail, Furneaux Islands Geotrail), Queensland (Brisbane Valley Rail Trail, Dig the Tropics, Boulder Opal), New South Wales (Port Macquarie – now completed), South Australia (various projects), Victoria (Kanawinka/Great Ocean Road area), and Norfolk Island.

In the Northern Territory, GSC member Mark Asendorf has reported that two well defined trans-continental 'road adventures' exist as self-drive geotours. These are.

- The Explorers Way Extending from Port Augusta to Darwin, and
- The Savannah Way which passes East-West from Cairns to Broome through the Gulf Country, Katherine Region, Victoria River District and the Kimberleys.

Mark has advised that a third - the Red Centre Way - is under reconstruction with government funding pledged to seal the Plenty Hwy as identified in the Northern Territory 10 Year Infrastructure Plan. He has also suggested that a fourth major geotrail is the largely unsealed, 'Gold Rush Way' linking the historic Arltunga and Halls Creek (WA) gold fields via the Tamani region – a known and active gold producing area.

5. Publicity and Promotion

As a result of inspired support from the GSA Governing Council, a key feature of the GSA's new web site is the continuing development of a new 'public' portal focusing on geotourism <http://bit.ly/2irGlem>

Membership of the LinkedIn Discussion group 'Australian Geotourism Development' now totals 387 members and continues to grow at a rate of some 12% per annum.

A repository for the posting of geotourism industry information is also available at <http://www.leisuresolutions.com.au/index.php/geotourism-industry-groups/>

Regular articles promoting geotourism continue to appear in the publications of the GSA (i.e. The Australian Geologist), the AIG and The AusIMM, whenever the opportunity arises. The February 2019 issue of GeoExPro featured geotourism (through a university alumni tour undertaken in September 2018) to the magnificent Flinders Ranges, pps. 52-55 https://assets.geoexpro.com/uploads/f9bbd806-dd06-4a10-923d-886281853915/GEO_ExPro_Favourite_Geoscience_Magazine_Oil_Gas_2019_v16_i1.pdf

Following discussions with Dr Anita Andrew, the GSC has formally agreed to take on responsibility for developing a geotourism themed AJES volume within a 2020 timeframe under the leadership of GSC member, Dr Young Ng, who is an accomplished author and co-editor of international geotourism publications.

6. Geotourism Standing Committee Linkages

Dr Ian Percival has provided most helpful linkage with the Geological Heritage Standing Committee over the past 12 months.

Mike Freeman and AusIMM PP Geoff Sharrock have also provided effective linkages with the Australian Institute of Geoscientists and The AusIMM respectively, with the Chair reporting regularly on geotourism industry progress to the Heritage Committee of The AusIMM.

PROPOSED AMALGAMATION OF THE GEOTOURISM AND GEOLOGICAL HERITAGE STANDING COMMITTEES

In August, the Governing Council advised the GSC of Council's draft Geoheritage and Geotourism Strategy and sought comments from individual Committee members.

Through arrangements agreed to between the then GSA President Dr Caroline Tiddy and Dr Ian Percival (the latter representing the Geological Heritage Committee), the following discussion points were conveyed to the President to be reported on at the special meeting to be held at AGCC on 15th October 2018 and at the GSA AGM on 14th October 2018.

1. The GSC fully supports the views of the Geological Heritage Committee in rejecting a proposed amalgamation of the two Committees.
2. The GSC is of the view that existing geoscience focused government agencies are best placed to develop a national geoheritage data base having regard to the existence of best practice templates in states such as Tasmania.
3. The GSC is deeply concerned about the total lack of consultation by the Governing Council with the Geotourism and Geological Heritage Standing Committees in developing the draft strategy documentation. In short the documentation totally ignores the current broad scope of activities of the Geotourism Standing Committee as reported in detail in the attached 2018 annual report and takes no account of the work being undertaken over the past 18 months with Geoscience Australia in developing a proposed national geotourism strategy that is intended to address the issue of georegion identification and subsequent geotrail and potential geopark development (refer attached report to the Governing Council at its meeting of 22nd August). The GSC is concerned that the geotrail only strategy being proposed by the Governing Council is too restrictive and not flexible enough to take account of a varied range of geotourism activities across Australia e.g. with proposed geopark development being assessed by the WA Government.
4. The GSC does not support the restructuring option that would involve a Governing Councillor performing the 'executive management' role of directing geotourism and geological heritage activities.
5. The GSC is concerned that the proposed strategy represents a radical departure from what was originally approved in the Governing Council approved Terms of Reference, to the extent that responsibilities now envisaged are far too narrow in scope and do not aspire to the original vision of fully nurturing geotourism development in Australia. In

this context, the GSC notes that the 'Background' to the GSA Geoheritage and Geotrail Strategy documentation appears to totally ignore these approved terms of reference and responsibilities and fails to explain satisfactorily why these radical changes need to be implemented so soon after 'strategic settings' were established only some 3-4 years ago.

6. The GSC stands ready to work cooperatively with the Geological Heritage Standing Committee, the Governing Council and other key stakeholders in devising and implementing an achievable strategy that best addresses identified issues and challenges relating to both geotourism, and in a manner that takes account of the needs and capabilities of the GSA's volunteer membership.

On 11th October, the President again wrote directly to GSC members thanking those that had responded for very useful feedback and advised that the main points would be collated in preparation for the geotourism-geoheritage discussion to be held on Monday 15th October at the AGCC.

However, this discussion in the format proposed did not take place at the October 15 meeting and was replaced instead by a 'Geotourism Workshop', using the De Bono Six Thinking hats approach to consider the statement, inter alia, 'the GSA could focus on geotrail development and geoheritage/geotourism assessment, facilitated by a new standing committee structure'.

It should be noted that apart from the GSC Chair, the only other members of the GSC available to participate in this workshop were Professor Ross Dowling and Alan Briggs.

At the meeting of the GSC held on 13th November, the GSA President, in the capacity as Working Group Chair, made the following points in relation to the Council's draft Geoheritage and Geotourism Strategy.

- Referenced meeting with the GSC Chair on 17th September where a commitment was made to report to the meeting.
- The notes from the Meeting of 15th October at AGCC had been circulated and comments were welcome.
- A new Governing Council, new Executive Committee and new President had been elected with the new Council members to be briefed at a meeting at the end of November.
- It was intended to have a broader discussion through a teleconference meeting of both the Geotourism and Geoheritage Committees sometime in February. Under her leadership, this work would be coordinated by the existing working group (including President Joanne Parr, Phil Gilmore, and Sue Fletcher).

- In the interim, there have been no drastic changes to the existing arrangements and certainly there is no intention at this stage of merging the two Standing Committees, and all other options need to be explored.
- The current review of GSA operations will also include Specialist Groups.
- Ian Lewis' interest in looking at geotrail coordination had been noted as has the recent GSNSW geotrail developments in NSW with Councillor Phil Gilmore on this working group.
- There was a need to review geotrail development in other states.

Subsequent to this GSC meeting and given the above-mentioned discussions with the AGC relating to the development of a national geotourism strategy, the Chair of the GSC was appointed AGC's Co-ordinator of the process for developing a draft National Geotourism Strategy, under the umbrella of the AGC Advocacy Sub-committee, and therefore resigned as Chair on 19th November.

It is currently understood that the current GSA President is organising an open meeting of both Standing Committees on 26th March to consider an updated Council strategy document that has taken account of the feedback from both Committees.

Angus M Robinson FAusIMM (CP)

Former Chair, GSC and currently, Coordinator, National Geotourism Strategy for the Australian Geotourism Council

20th March 2019

In addition, GSC members attending various AGCC activities in October 2018 included Alan Briggs, Ross Dowling, Ian D Lewis, Ian Percival, and Angus M Robinson.

2019 – APRIL 2021

AGC National Geotourism Strategy Reference Group Membership, 14th Jun 2019

In the development of the National Geotourism Strategy that was launched in April 2021, the Australian Geoscience Council (AGC), it was decided to open up dialogue with the Geoscience Working Group (GWG) as a logical first step in consulting with relevant stakeholders such as Geoscience Australia and State/Territory Geological Surveys, and to be followed by discussions with other stakeholders such as the AGC constituent members, key government land management organisations, and the tourism industry generally.

The opening up of dialogue with the Geoscience Working Group (GWG) as considered a logical first step in consulting with relevant stakeholders such as Geoscience Australia and State/Territory Geological Surveys, and to be followed by discussions with other stakeholders such as the AGC constituent members, key government land management organisations, and the tourism industry generally.

Broad topics, which provide for consideration of incremental development to be canvassed with the GWG would initially include the following.

1. **Geotourism as a means of celebrating geoheritage** by expansion of the Geotourism map concept (as developed in NSW) progressively across Australia on a 'state by state' basis, as well as consideration of new ICTs (e.g. smartphones, 3D visualisation, AR & VR) and GIS technologies as a cost effective means of accessing and better communicating geological content for travellers and residents in regional Australia.
2. **Enhanced coordination nationally of geoheritage data bases** with the objective of highlighting areas of both geotourism value and geosites which need to be protected from vandalism.
3. Consideration of establishing a **national set of administrative procedures for 'georegional' assessment** to provide for potential geopark nomination at state and national levels (e.g. Rottnest Island Conservation area) and as approved by governments, at a UNESCO Global Geopark level.
4. **New Geotrail development** – local, regional and national engagement to open up dialogue with existing walking, biking and rail trail interest groups and operators to highlight the availability of quality geoscience data.
5. Mechanisms for **collaboration with providers of other areas of natural (bioregion) and cultural heritage content**, inclusive of mining heritage (e.g. mining companies, geological and mining museums, historical societies, as well as specialist groups with interests in flora and fauna etc.).
6. Using **geotourism to strengthen Australia's international geoscience standing** and enhance its influence for the long-term benefits of Australian geoscientists through the establishment of sister park, sister museum/rock garden, sister geological and mining heritage sites relationships, particularly with China and countries in the Asia-Pacific region.

To undertake consultation with the other stakeholder groups, **Angus M Robinson**, NSW based Co-ordinator for the proposed National Geotourism Strategy chaired a reference group comprising the following individuals (detailed below) representing various geotourism interest groups. This grouping reported to **Dr Bill Shaw, President, Australian Geoscience Council Inc.** and **Dr Jon Hronsky OAM, Chairman, Australian Geoscience Council Inc**

* **Mark Asendorf*** Managing Director, Marmel Enterprises, and Permit Reform Project Manager, Northern Lands Council, NT and incoming Chair, Geotourism Standing Committee of the GSA.

* **Jason Bradbury**, Geoscientist, Natural Values Conservation Branch of the Department of Primary Industries, Parks, Water and Environment, Tasmania

* **Dr Alan Briggs***, President, Geoparks WA

* **Dr Sandra Close Hon FAusIMM (CP)**, Chair, The AusIMM Heritage Committee, Victoria

* **Bob Conroy***, Administrator, Jenolan Caves Reserve Trust, NSW

- * **Professor Ross Dowling AM*** FGSAust, Australian Institute of Geoscientists (AIG) member, WA
 - * **David Hudson, Chairperson**, Ewamian Aboriginal Corporation, Qld
 - * **Jason Irving**, Manager, Protected Areas Conservation, NRM, & Protected Area Policy, Parks and Regions, South Australian Department for Environment and Water, SA*
 - * **Professor Patrick James**, Geotourism Sub Committee member of the GSA, SA
 - * **A/Professor Bernie Joyce***, Chair, Greater Blue Mountains WHA Advisory Committee, NSW
 - * **Ian D Lewis***, Hon Director, Kanawinka Geotrail, and Chair, Geotourism Sub Committee of the GSA, SA
 - * **Patrick Maher**, Manager, Eastern Australia and Pac-Rim, CSA Global Mining Industry Consultants, and AIG member, Qld
 - * **Doug McConnell**, Member, Etheridge Geoscience & Mining Heritage Reference Group, Qld
 - * **Simone Meakin**, Acting Director, Geoscience Information, Geological Survey of NSW, Division of Resources and Geoscience, NSW
 - * **Ken Moule***, Chief Executive, GBM Global, and Member, Etheridge Geoscience & Mining Heritage Reference Group, Qld
 - * **Dr Young Ng***, Chairman, Association for Geoconservation, Hong Kong
 - * **Sharon Prior**, General Manager, Ewamian Aboriginal Corporation, Qld
 - * **David Robson***, Associate, Leisure Solutions®, and representative of the Australian Society of Exploration Geophysicists, NSW
 - * **Michael Vicary**, Mineral Resources, Tasmania and Chair, Geotourism Sub Committee of the GSA, Tasmania
 - * **Ian Withnall**, former GSA Councillor, Chair, Etheridge Geoscience & Mining Heritage Reference Group, and Chair, Earth Sciences History Group of the GSA, Qld
 - * **Monica Yeung**, Director, Gondwana Dreaming, ACT
- * Members of the GSA Geotourism Standing Committee

Input from the Reference Group led to the formulation of the seven Strategic Goals of the NGS which include a new recommended goal to ‘develop and enhance the geoscience interpretation and communication skills of everyone actively involved in the presentation of geosites, enabling the provision of accurate and thematic information in an accessible manner.’

Appendix

Listing of Geotourism Contributors to Working Groups, 2011-2021

- Jane Ambrose, Director, Natural Heritage North, Heritage & Wildlife Division, Department of Sustainability, Environment, Water, Population & Communities, Canberra, ACT
- Mark Asendorf, Marmel Enterprises, Darwin, Northern Territory
- Tom Bateman, linkage with the AIG, Perth, WA
- Veronica Blazely, Director, Natural Heritage Section, Department Environment, Canberra, ACT

- Jason Bradbury, Geoscientist, Natural Values Conservation Branch of the Department of Primary Industries, Parks, Water and Environment, Hobart, Tasmania
- Dr Alan Briggs, President, Geoparks WA, Perth, WA
- Dr Sandra Close AM, Chair, The AusIMM Heritage Committee, Melbourne, Victoria
- Michael Comfort, Section Leader, Geodiversity Conservation and Management Section, Tasmanian Department of Primary Industries, Parks, Water and Environment, Hobart, Tasmania
- Bob Conroy, Executive Director Park Management, Park and Wildlife Group, Office of Environment and Heritage, Department of Premier & Cabinet, Sydney, NSW
- Professor Ross Dowling AM, Foundation Professor and Head of Tourism, School of Marketing, Tourism & Leisure, Perth, WA
- Michael Freeman (linkage with the AIG), Bunbury, WA
- Kasia Gabrys, Manager, Cultural Heritage & Biodiversity Management, Kakadu National Park, Northern Territory
- Dr Bruce Goleby, Chief Geophysicist and Group Leader Innovation and Specialist Services Group, Geoscience Australia, Canberra, ACT
- David Hudson, Chairperson, Ewamian Aboriginal Corporation, Qld
- Jason Irving, Manager, Protected Areas Conservation, NRM, & Protected Area Policy, Parks and Regions, South Australian Department for Environment and Water, SA
- Professor Patrick James, Geotourism Sub Committee member of the GSA, SA
- The Late Associate Professor E B Joyce, Earth Sciences School, The University of Melbourne, Victoria
- Bruce Leaver AM, Chairman, Sapphire Coast Tourism, Cobargo, NSW
- Ian D Lewis, Hon Director, Kanawinka Geopark, Adelaide, SA
- Patrick Maher, Manager, Eastern Australia and Pac-Rim, CSA Global Mining Industry Consultants, and AIG member, Qld
- Patrick McKeever, Chief of the Earth Science Section, UNESCO, Ireland
- Simone Meakin, Acting Director, Geoscience Information, Geological Survey of NSW, Division of Resources and Geoscience, NSW
- Professor Suzanne Miller, Director, South Australian Museum, Adelaide, SA
- Ken Moule, Chief Executive, GBM Global, and Member, Etheridge Geoscience & Mining Heritage Reference Group, Qld
- Rick Murray, Managing Director, Middle Star Pty Ltd, Darwin
- The Late Doug McConnell, Member, Etheridge Geoscience & Mining Heritage Reference Group, Apollo Bay, Victoria
- Ian Neuss, Councillor, Australian Institute of Geoscientists, Sydney, NSW
- Dr Young Ng, Founder and Chair of the Hong Kong Association for Geoconservation, Sydney, NSW
- Dr Ian Percival, (representing the Geological Heritage Standing Committee), Sydney, NSW
- Vicki Pow, Canberra, ACT
- Sharon Prior, General Manager, Ewamian Aboriginal Corporation, Qld
- Angus M Robinson, Managing Director, Leisure Solutions Pty Ltd, Sydney, NSW

- David Robson, Associate, Leisure Solutions®, Sydney, NSW
- Geoffrey Sharrock AM, President, The AusIMM, Newcastle, NSW
- David Tucker, Principal, Western River Pty Ltd, Perth, WA
- Dr Susan Turner, Hon Research Fellow, Queensland Museum and Geological Consultant, Brisbane, Qld
- Michael Vicary, Mineral Resources Tasmania, Hobart, Tasmania
- Nancy Vickery, University of New England, Armidale, NSW
- Dr Neil Williams, University of Wollongong, Canberra
- Monica Yeung, Director, Gondwana Dreaming, Canberra, ACT
- Ian Withnall, former GSA Councillor, Chair, Etheridge Geoscience & Mining Heritage Reference Group, and Chair, Earth Sciences History Group of the GSA, Brisbane, Qld

Ex-Officio:

- Margaret Brocx, National Convenor, GSA Standing Committee for Geological Heritage, Perth, WA