MARKETING GEOTOURISM SUSTAINABLY[#]

Angus M Robinson¹ and David Roots²

Author Details

Angus M. Robinson¹, Managing Partner of Leisure Solutions[®], P.O. Box 638, Strawberry Hills NSW 2012. www.leisuresolutions.com.au Email: angus@leisuresolutions.com.au

Dr David Roots², Lecturer, Earth and Environmental Science, Insearch (UTS), Level 3, 187 Thomas Street, Haymarket NSW 2000. Email: davetheclimber@hotmail.com

Abstract

Ecotourism is ecologically sustainable tourism, focusing on natural areas. Its aim is to foster environmental and cultural understanding, appreciation and conservation. Geotourism is ecotourism with an added geological theme. Geotours visit natural scenic landforms and explain the surface and deep processes that shaped them. Tourists, seeking to have the natural environment interpreted for them, can expect explanations of geology as well as flora and fauna, creating a holistic view of ecosystems. This enhances their support for the conservation of ecosystems for future generations.

Geotourism has great potential as a new niche ecotourism product, but will require the same disciplines that apply to other niche, 'high value-added' tourism activities. Wherever tourism contributes a direct environmental benefit to a visited location, its clients gain empathy for the holistic heritage of the area, and this reward creates enhanced customer loyalty to the operator.

Geotourism, if positioned as a supplementary knowledge-adding product within an attractive ecotourism experience will attract affluent 'over 45 y.o.' professionals, their partners and friends through alumini and professional interest groups. It can also assist 'society and environment'/science teachers to re-educating them in pleasant (non-classroom) environments, adding field experience often lacking, possibly also offering them a diploma to assist advancement in their profession.

The geoscience profession should perceive geotourism as a key strategy for both career introduction and professional development. It can provide "feel good" educational and social experiences to a wide range of community stakeholders. The Earth Sciences in general need the promotion offered by a widening understanding of geoscience heritage and earth systems issues.

Keywords

Sustainable Geotourism, Marketing, Over 45 y.o., Geotourists, Alumni, Geotourism Education.

Nature of Geotourism

Tourism is travel for pleasure.

Ecotourism

Ecotourism is ecologically sustainable tourism with a primary focus on experiencing natural areas that fosters environmental and cultural understanding, appreciation and conservation.

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome© Ecotourism began with small groups travelling to relatively undisturbed areas, appreciating natural scenery and traditional cultures.

World tourism has become an immense global industry, with an impact related to its size. Now Ecotourism is increasingly seen as part of world tourism. Governments and the tourism industry are using "ecotourism" as a brand for 'good' or 'green' tourism, though at times all seem oblivious of its original objectives.

In the past, sustainable small-scale ecotourism was led by academics keen to avoid inflicting damage, and with the conscience to leave untouched locations unable to survive any level of attention.

The downside of the mainstreaming of ecotourism is that the activity itself may progressively destroy the very values that appeal to the ecotourist. This is a continuing problem, particularly now as the greatest impact of mass ecotourism is falling on the most fragile environments.

To address this situation, the peak Australian industry association, Ecotourism Australia Ltd, manages a certification scheme to provide industry, protected area managers, local communities and travellers with an assurance that a certified product is backed by a commitment to best practice ecological sustainability, natural area management and the provision of quality ecotourism experiences.

Geotourism

Geotourism is ecotourism or tourism related to geological sites and features, including geomorphological sites and landscapes (Joyce 2006).

Geotours visit natural scenic landforms and explain the surface and deep processes that shaped them. Tourists, seeking to have the natural environment interpreted for them, can expect explanations of geology as well as flora and fauna, creating a holistic view of ecosystems. This enhances their support for the conservation of ecosystems for future generations.

The complexity of geology has so far restricted geotour leadership in Australia to geologists, and often to those with a sense of adventure e.g. Greg Mortimer, David Roots, Robert Coenraads, Ian Hutton, and Chris Bowkes.

Geotourism has the same objectives as ecotourism, but particularly seeks to explain the beauty and origins of the Earth - all landscapes, landforms, plants and animals – 'Geologica' (Coenraads R.R and Koivula, J.I., 2007). Geotourism complements scenic beauty with revelations of how they were formed. Geotourists see this additional information as doubling the value of a tour.

A significant feature of geotourism is that it does not require untouched landscapes as its playground. A great tour can equally be delivered on a quarry floor, in a historic mining area, on roads in a national park, or in total wilderness. All that is needed is some fascinating geology, and a knowledgeable interpreter.

Geotourism, by diluting the mainly biological/cultural emphasis of mainstream ecotourism, will allow ecotourism to expand away from (in part) environmentally sensitive areas. So geotourism can be seen as more eco-friendly than ecotourism per se.

Geotourism therefore offers the opportunity to provide relief from the overuse of ecologically sensitive areas.

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 2 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome[®]

Sustainable Marketing of Geotourism

Present Status of Australian tourism

Tourism Australia, the Australian Government agency responsible for promoting Australia world-wide as the world's best destination for business and leisure, focuses its activities on the markets offering growth opportunities and the best return on investment.

According to the latest information available from Tourism Australia, there were 1.5 million visitor arrivals to Australia during the three months to March 2008, unchanged relative to the same period of the previous year.

There were 5.2 million visitor arrivals during the year ended 31 March 2008, an increase of 1 per cent relative to the previous year. However, there were 513,700 visitor arrivals during March 2008, a decrease of 2 per cent relative to the same month of the previous year. The high exchange rate and the 'long haul' nature of Australia as a destination are amongst factors that are contributing to this apparent downward trend.

Development of Niche Products

Clearly some careful consideration needs to be given to driving growth in high-yield sectors through the development of successful niche markets, which is indeed one of the strategies proposed in the *Tourism White Paper* (Australian Government, 2004).

Identifying new niches such as geotourism is an obvious response to this approach. In this regard, in the year ended June 2007 (Tourism Research Australia, 2007), there were some 3.5 million international 'nature tourism' visitors representing about some 68% of all international visitors to Australia. The top three nature activities for international visitors were visiting a national/state park (68%); visiting wildlife park/zoo/aquarium (58%); and visiting botanical and other public gardens (53%).

Nature based activities including visiting national parks/state parks, bushwalking or rainforest walks, visiting botanical or other public gardens, going whale or dolphin watching and visiting farms along with a plethora of active outdoor activities featured highly as preferred activities of domestic tourists in Australia in a detailed segmentation report undertaken earlier this year (Tourism Research Australia, 2008).

Sustainable Geotourism

Pforr and Megerle, 2006 have cited work by Buckley, 2003 and Lang, 2003 that defines geotourism as the intersection of nature-based tourism focusing on geo-objects and sustainable

development. They see geotourism in the context not only of a new market segment but also as a 'normative direction contributing to geo-conservation and sustainable development'. The authors also cite Megerle and Megerle, 2002 who suggest that geotourism should be viewed as part of a holistic management approach to the broad field of geological and landscape history including its interconnectedness with flora and fauna, the cultivated landscape, and present land use. They see sustainability and environmental education as integral parts.

Both ecotours and geotours are educational in content. Both discuss the natural environment. The difference lies in content, though much is overlapping.

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 3 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome© Geotourism is ecologically sustainable tourism that explains the scenery in terms of how geological processes formed the patterns that can be observed in landforms in a plethora of landscapes such as mountains, deserts and islands, and in the rock outcrops that can be observed in coastal cliffs, creeks, road cuttings, lookouts, quarries, and through walks in national parks. Most of these are erosional sites, none need to be ecologically challenged.

Geotourism does not need wilderness, but it can go there. Geotourism can be delivered through a wide range of transport modes e.g. cars, coaches, ships, boats, and on foot.

The potential impact of increasing world tourism is enormous, and this should preclude its involvement with wilderness areas. Global tourism must be ecologically sustainable, and shifting the emphasis from ecotourism to geotourism represents a positive step towards more sustainable global tourism.

Whilst the ground work was laid with the release of the National Ecotourism Strategy in 1994, Tourism Australia has now developed a Sustainable Tourism Plan that involves, amongst a range of objectives:

- creating a sustainable tourism focus for Tourism Australia marketing activities; and
- creating a high profile for best practice sustainable tourism product.

There is no doubt that tourism is increasingly being seen as making a massive contribution to greenhouse gases and global warming. Most tourists from developed countries can be regarded as carrying a heavy carbon-footprint, and these very same tourists are likely to be those that most appeal to ecotourism/geotourism products, particularly to those in long-haul destinations such as Australia.

Is Simply Nature Tourism Enough to Attract New Customers?

The marketing of the Australian tourism industry for both inbound and domestic customers has been become segmented in both demographics and activities. It could be argued that industry marketers have failed to see the 'wood for the trees' and may have lost sight of the proposition that the offered product value must be compelling in content, variety and quality so as to attract customers from the widest spectrum of demographic groupings.

The global market is looking for unique product experiences and a broader mix of experiences e.g. in the adventure tourism business, a New Zealand operator offers jet boats, 'bungy jumping', 'heli-skiing' all in a single product! The group tour market is well suited to this new approach. Customers for tours have become more sophisticated, well traveled and discerning and generally come from higher socio-economic demographics. They are also intelligent, 'thinking' travelers.

The incorporation of the geotourism experience with traditional nature tourism and elements of cultural tourism creates a more holistic experience, and is a move towards the experiential tourism model. In short, 'experiential tourists seek memorable experiences (Smith, 2006).

In this sense, sustainability is achieved through providing a high quality experience encouraging return visitation, and attracting new customers by 'word of mouth'.

Geotourism has great potential as a new niche ecotourism product. However, it will still require the same disciplines that apply to other niche, 'high value' tourism activities.

Moreover, marketing management decisions need to be considered as part of the overall marketing mix – the five Ps – product, place, price, promotion and people.

Geotourism Core Product Attributes - Ecotourism plus Geotourism

Two outstanding examples (one within Australia and the other overseas) of type geotourism products follow.

Case Study – Lord Howe Island, Australia

This most beautiful of all Pacific Ocean islands, Lord Howe Island (figure 1) has environments ranging from mountaintop mist-forests to ocean surf beaches.



Figure 1 – Lord Howe Island (600 kilometres due east of Port Macquarie, New South Wales (Source: Tourism NSW)

The island is the eroded crater of a 'hot-spot' volcano of greater than 50 kilometres in diameter. In the distance, Balls Pyramid and other lesser islands also sit on the volcanic pedestal. Lord Howe Island is the youngest of a string of volcanoes (mostly submerged), tracking the movement of the Pacific Plate across a fixed deep hotspot. The older, shallow tops of other volcanoes, now extinct, occur to the North e.g. Middleton Reef, which is visible from the surface as a circular coral reef with an internal lagoon.

The majority of Lord Howe Island is composed of horizontal basalt flows. At the northern end of the island, inclined flows mark the outside sloping volcano flanks. The highest point of the island is Mt. Gower (875m), giving the island a vertical range of different environmental ecosystems, and some challenging walking tracks.

Lord Howe Island beaches are composed of coral sand, and during the most recent ice age, sand from the surrounding volcanic pedestal blew back across the island and consolidated into large deposits of sedimentary limestone, containing caves. A number of lava tubes are visible around

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 5 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome© the island.

Lord Howe Island is home to many endemic birds, plants, and insect species. For example, the flightless Lord Howe Woodhen is one of the rarest birds on earth, having been hunted almost to extinction. Its dramatic recovery is due to the establishment of a breeding program, and the elimination of cats and rats from the island. The Lord Howe Woodhen can now be seen walking around on the island, an essential part of the island's tourist value.

The Lord Howe Island *Phasmid* is another case of last-minute species recovery on the island. This giant stick insect died out there many years ago and was thought extinct. However, during a rock climb on Balls Pyramid in 1965, David Roots photographed a dead one, intact. This led to a search by the NSW National Parks and Wildlife Service that found eggs and was therefore able to extract DNA. The *Phasmid* is now safe, and it is hoped to introduce them back to Lord Howe Island. A lucky sighting by a 'tourist' led to a species recovery.

An additional tourist-derived benefit was delivered to Lord Howe Island several years ago, while David Roots was leading a tour group there, in winter. One morning, returning from a pre-breakfast swim, Rob Coenraads and David Roots started pulling out the introduced pest Asparagus Fern. The next day, all of the tour party became involved, and the following day, the entire boarding house was helping out, with logistic support from the Lord Howe Island Board. That event has grown into a full-scale bush regeneration programme, and has eliminated Asparagus Fern from 30% of the island.

Recovery of the Lord Howe Woodhen and the *Phasmid*, and the Lord Howe Island Bush Regeneration Programme, are regarded by the Lord Howe Island Museum curators as the three major environmental successes of the island which have collectively changed the attitude of the islanders to their own environment, and this is clearly noticed by visitors. Clearly, it is good policy for ecotours and geotours to be associated with conservation initiatives.

Past geotours to Lord Howe Island have involved a wide range of academic knowledge. The geological heritage of the island is revealed by the numerous lava flows, ash falls, dikes and lava caves, and by the presence of the calcarenite that date from the last ice age. These alone would provide enough for a 14-day excursion. However it would be impossible to visit such a beautiful place without extending the teaching to include the biosphere, history, climate and the sheer beauty of the island.

Case Study – Kamchatka Peninsular; Russia; and the Kurile Islands and Hokkaido, Japan

Wherever subduction generates fold-mountains, island arcs and explosive volcanoes, geotourism opportunities abound.

The Pacific Rim has an immense linear concentration of high-class potential geotourism locations. Many are already famous as scenic icons. They stretch along the west coast of Southand North-America, along the Aleutian Islands to Kamchatka, south down the Kurile Islands to Japan, Indonesia, PNG, and through to New Zealand. This incredible suite of potential geotourism opportunities brings with it an equally wide range of cultures and environments.

For example, the Kamchatkan Peninsula (figure 2) has a double backbone of volcanoes, many of them currently active. Transport by helicopter is common in Kamchatka, allowing access in a single day to composite volcanoes that cover the full range of topography from perfect peaks to recently exploded, single and twin caldera mountains. This is the most incredibly beautiful and interesting geotour country. And they have plenty of salmon running in summer, and wild bears in the surrounding World Heritage wilderness!

Cape Olyuto Govena Peninsula Ossora a Karaginskiy Island Karaginskiy Gulf Bering RUSSIA Uka 🛛 Ozernoy Sea Kamchatka COMMANDER IS Peninsula Bering I Medny I. (amchatka Guli Petropavlovsk-Kamchatsky Cape Lopatka Atlasova Shumshu Paramushir

The Kurile and Aleutian Islands are difficult to access, except by cruise ship. However, Hokkaido and Kamchatka are easily accessible and have good tourist facilities. Both locations can be visited in summer, when temperatures are quite warm. In winter, they are ski resorts.

Figure 2 – Kamchatka Peninsular, Russia (Source: Aurora Expeditions)

Cultural Tourism

Within the holistic package offered to the experiential tourist, as well as the nature-based and geotourism components can be added the following cultural activities (Hossain, A., Heaney, L. and Carter, P., 2005):

- Attending theatre, concerts or other performing arts.
- Visiting museums or art galleries.

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 7 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome©

- Visiting art/craft workshops/studios.
- Attending festivals/fairs or cultural events.
- Experiencing Aboriginal art/craft and cultural displays.
- Visiting an Aboriginal site/community.
- Visiting history/heritage buildings, sites or monuments.

Hossain et al recognise that it is important to appreciate that the activities-based definition of cultural tourists is not mutually exclusive of other interests e.g. a cultural tourist can also be a wine tourist or a nature-based tourist.

In the Australian setting, cultural experiences can be delivered in collaboration with a wide range of community and special interest groups e.g. National Trust of Australia.

Bilateral Inbound/Outbound Products

The opportunity exists for Australian geotourism packagers to co-market the best of what Australia offers with comparable offerings in targeted offshore markets such as North America, North Asia, New Zealand, Europe and UK where alumni groupings are well established and are active in specialised 'high value-added' tourism. In the USA, organisations such as GeoVentures of the Geological Society of America (http://www.geoventures.org) and the Smithsonian Institution travel program (http://www.smithsonianjourneys.org) are already significant players.

Case Study – North West Highlands, Scotland

Mc Keever, Larwood and Mc Kirdy, 2006 have recognised that geotourism in Scotland is its infancy, and yet the North West Highlands, is the very birthplace of the science of geology. This is perhaps the best example of the intersection of wilderness, geology, geomorphology, history and culture within a country that has well organised and quality tourism infrastructure.

According to the website of the North West Highlands Geopark - Scotland's first such park (http://www.northwest-highlands-geopark.org.uk/story.html) this Scottish attraction is "a place where you will experience the incredible legacy left by an extraordinary geological past. Our mountains and coasts, our flora and fauna, our communities and culture – all owe a great deal to the difference which this geology makes".

The North West Highlands Geopark is one of 23 partners in the European Geopark Network. Globally there are 35 Geoparks – all endorsed by UNESCO and all driven by local communities seeking to celebrate their geological heritage and achieve sustainable development.

The North West Highlands Geopark has beautiful scenery, strong communities, and world-class geology.

Travel and Accommodation

Travel and accommodation needs for geotourists will need to take account of both demographics and traveler category i.e. group or free independent traveler (FIT).

Recent work undertaken by Tourism Research Australia, 2008 on trends in domestic tourism has demonstrated how travel behaviour and demand for tourism products differ as people travel and move through different stages of their life.

The outdoor nature of the ecotourism product does provide the opportunity for accommodation operators to innovate with accommodation styles such as on-site 'up market' camping as an

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 8 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome[®] alternative to four/five-star hotels in nearby resort areas. For groups of say 10 to 12 people, the availability of suitable accommodation is important. For example in Scotland, guest houses tend to be pretty small i.e. generally taking up to around six people and the only feasible alternative is small hotels (Gillian Harrower, pers comms).

On ground travel needs need to be carefully considered having regard to a balance between the 'uniqueness' and comfort.

Again selection of the air travel provider is a balance between 'value of money' and the other key issues of quality, service and global networks, also recognising the important need to be conscious of customer preference for frequent flyer arrangements.

For FITs, the emergence of the 'flashpacker' phenomena is an interesting development. The flashpacker is an experienced and experiential traveler without a budget, a generally older traveler who enjoys independence, a willingness to explore new destinations, a desire to connect with local peoples and focus on adventure rather than comfort, a traveler who may stay in a five-star hotel one night and camp under the stars the next (Maxwell, 2008).

Above all the arrangements (including of course cuisine choice) that are packaged in a geotourism product must deliver superior customer service. This should focus particularly on the tangibles delivered, the reliability of the delivery, the willingness to assist customers, the knowledge and courtesy of the service deliverers and the caring attention provided to customers. The total experience must exceed customer expectations.

Warranty

Given an increasingly litigious operating environment, careful consideration does need to be given to the representations offered in marketing material having regard to providing flexibility needed to manage itineraries. This must allow for circumstances (e.g. weather, delays etc.) outside of the control of the operator. Similarly, given the highly interpretive nature of the total experience, attention will need to be given to ensure that expectations are not inadvertently oversold.

Geotourism – Place/Position

The 1994 National Ecotourism Strategy ('the Strategy') considered that ecotourists may include a mix of independent travelers, people who travel in organised groups of a scientific, educational or recreational nature, and individuals or families who are interested in an ecotourism experience as part of a varied holiday. Whilst based on limited sources, the Strategy then considered that the ecotourist appears to be well educated, professional/semi-professional, 20-50 years of age, independent and individualistic, looking for alternatives to be traditional tourist destinations and experiences, and with significant spending power.

With the passage of time and with the benefit of more detailed research, a different picture of the ecotourist has emerged.

Defining the Target Customers – the 45 y.o. plus Market

During 2008, the number of Australians over the age of 45 is predicted to exceed those under 45.

Broadly speaking, these people fall into two groups i.e. 'mature or seniors' (+63) and 'baby boomers' (45 - 62). According to Canning, 2008, these 'baby boomers' are predicted to spend more than \$34 billion on recreation this year (spokesperson from market researcher,

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 9 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome© Forseechange). Moreover, baby boomers embrace new technologies and are very open and adaptable, going online frequently. They are especially confident with travel sites, both for research and purchases (spokesperson from market research company, Evergreen).

Recent work undertaken by Tourism Research Australia, 2008 has examined these age profiles in considerable detail particularly from a life-stage analysis viewpoint. The research indicates that:

- People in their late working life (ages 50-59, with or without children) are generally 'empty nesters' who possess large discretionary incomes, as they are generally debt free after having paid off their mortgages, their children will have completed or neared completion of their higher education, and most will no longer have older children living at home.
- However, for those in early post retirement (ages 55-64, not working), they are also largely debt free with even more discretionary income available for travel purchases.
- Those in late post retirement (ages 65-69, not working), possess much more time to investigate travel and other purchase and weigh up the value of their purchase, and make more considered decisions that younger groups.
- Finally, for those later in life (+70), as technological, health and medical advances continue, life expectancies will continue to increase, resulting in this group being healthier, fitter and more able to continue to travel than past generations reaching this age.

Stroud, 2007 argues that lifestyle not age is the key determinant in marketing to the '50-plus market'. He argues that whilst age predicts an 'average' of customer behaviour, life style predicts actual behaviour. Based on extensive studies undertaken with over 2000 respondents in the UK, Stroud has defined seven lifestyle groups, of which three groups fall into the grouping of high affluence and a progressive outlook, and are therefore most likely to be interested in new travel products.

- Live Wires (17% of the +50 market, average age of 58) people who have busy and fulfilling lives they enjoy technology and are keen to keep up to date with the latest developments. Socialising and holidaying are important parts of their lives, as is maintaining a healthy lifestyle. Their main priority is to continue enjoying their comfortable existence.
- Bittersweet Have it All (11% of the +50 market, average age of 65) people who are financially secure, live in comfortable homes and take regular holidays. They enjoy good health and overall are living a comfortable retirement. However, they tend to reject change, are intolerant and self-righteous, and are not happy with the way the world is developing.
- Rat Race Junkies (15% of the +50 market, average age of 54) people who are ambitious and still working. Many are bringing up their second or third family, are anxious about their finances, but won't compromise their buying habits. They like feeling good about themselves and are driven to succeed in their career, home and family. They are anxious about how the future might develop and assume that they will work forever, out of both interest and financial need.

Having regard to these demographic and lifestyle considerations, it is hoped that geotourism, if positioned as a supplementary knowledge-adding product within an attractive ecotourism experience, will attract affluent 'over 45 y.o.' customers. These may come from amongst geoscience professionals from within these segmentations, as well as their partners and friends, particularly through alumni and professional societies such as the Geological Society of

Australia (GSA), the Australian Institute of Geoscientists (AIG), and The Australasian Institute of Mining and Metallurgy (AusIMM).

Based on preliminary information sourced from these associations, it is estimated that the Australian market size of geologists in this age-group who are associated with these organisations (i.e. 'alumni' geologists) may be of the order of 2,200 to 2,500. There are of course other smaller geoscience societies in Australia (e.g. the Association of Exploration Geochemists, the Australian Geoscience Information Association, the Australian Quaternary Association, the Australian National Chapter, International Association of Hydrologists, the Australian Society of Exploration Geophysicists, and the Petroleum Exploration Society of Australia). Allowing for overlapping memberships, it is not unreasonable to expect that the total 'alumni' market of 'baby boomer' geologists may be conservatively around 3,000 – 4,000 in total.

Secondary teachers in Australia who specialise in either earth or environmental sciences or in geography streams of 'society and environmental studies' may also have an interest in geotourism. A recent research study suggests that a total of some 26,500 individuals may fit into this category, of which it could be expected that perhaps some 16,000 may fall within the over 45 age range.

Based on these estimates, it is considered that the over 45 y.o. market of Australians most interested to participate in geotourism is of the order of some 20,000 individuals (as well as their partners).

This potential market size could be expanded by considering accessing the alumni of universities. Some 22 of the 38 Australian tertiary institutions teach earth sciences, natural or environmental courses (available at http://www.gsa.org.au/resources/careers.html).http://www.gsa.org.au/resources/careers.html I. All of these institutions have affiliated alumni programs. To this can be added the alumni of friends groups associated with cultural institutions committed to natural history e.g. the Australian Museum, Western Australian Museum, South Australian Museum etc.

Given the relatively small size of the Australian 'geoscience interest' market, content packaging will be critical. To address this issue, Leisure Solutions[®] and the School of Marketing, Tourism & Leisure at Edith Cowan University are currently undertaking a market research project of members of the Geological Society of Australia.

Nevertheless, it should not be forgotten that in the wider community, other 'alumni' groupings such the medical profession and engineers represent a potential customer base. Bushwalking groups should also be considered.

Pricing Geotourism Products

Pricing decisions for geotourism products will need to take account of the perceived 'value add' achieved through the product bundling and its uniqueness, having regard to what the target market will reasonably bear, the length and nature of the distribution chain, and the likely pricing response of competitors.

Consideration could also be given to building into the package pricing an allocation for donation to scientific (conservation related) research projects in the areas visited during a geotour.

Promoting Geotourism Products

Promotion decisions are those related to communicating and selling to potential customers. Promotion decisions involve advertising, public relations, travel media, marketing co-lateral and a strong presence on the internet and at carefully targeted trade events, often those associated with conferences organised by the alumni groupings.

The preferred channels for marketing geotourism may commence through alumni organisations and professional societies, but to reach the more peripheral interest groups, retail marketing through Australian retail specialists such as Travel Associates will be necessary.

Satisfied (and more specifically delighted) customers from within alumni groupings will invariably attract interest in geotourism related activities from friends, family and work colleagues, whose core interests may not at first seem related to this area. If a successful unique geotour offers a better experiential experience than the more traditional 'run of the mill' tours to historic sites, ancient buildings and the like, 'word of mouth' marketing for travel is a powerful sales driver.

People and Customer Service – Geotours

The quality of the tour information provided either prior to or during the geotourism tour is a key component of achieving high assurance performance for the overall customer service experience. Given the technical nature of the geotourism experience, care needs to be taken to ensure that the interpretation delivered is clear and understandable – the museum dictate of ensuring that information presented needs to be pitched at a lower secondary school level should not be overlooked (Robinson and Flett, 1989), whilst understanding that some more technically literate tour participants will be expecting access to more detailed knowledge and text.

Hence, resources will need to be developed to researching both the availability of scholarly reports and translating these into material more suitable for general reading and understanding.

Similarly, the selection and training of tour guides is important. Whilst knowledge is one important attribute, tour guides need to be excellent communicators with skills attuned to some degree of entertainment and assuring the 'day to day' human needs of the individuals in their groups are well met.

What brings people to educational tours and to Geotours particularly?

Geology can add value to every tour that travels out-of-doors.

Most specialist tourists are well informed amateurs. They are remarkable for their habit of repeating tours, partly because of the limited number of specialist locations available to them, and partly because they know by 'word of mouth' where their friends are going. They spend their tour evenings 'talking shop', and that's really why they came. It's part of belonging. Geologists on tour are the same!

Case Study – Continental Plate Centres

Though not as obvious, continental plate centres have their own special revelations. While leading a tour to central Australia, the coach was bogged by an unseasonal thunderstorm, isolating the group in a small depression along with 60 other people. This group was entertained

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 12 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome® for three days, by exploring the "featureless" desert surface. In folded marine sedimentary rocks, an outcrop of chert that had been an aboriginal artifact quarry was located. There were hundreds of not-quite-good-enough spear points and other artifacts littering the ground. It turned out to be a significant indigenous site. The specialist tour guide led the group to discover how the land changed with rain from a rust-coloured barren sand desert into an endless carpet of green lichen and moss – on successful days, geology, biology and culture!

The tour group participants were fascinated. They were reluctant to leave when the roads were reopened. Back in Sydney, the unplanned desert stop was voted the most memorable part of the tour. And not a volcano in sight!

Geotour Guides/Tour Leaders

A good geotour generally requires a great leader, a great location, and great background logistics.

Personality matters. A pedantic tour leader, who gets involved in the fine detail of phase diagrams, will soon lose the tour participants. A broad brush is necessary to begin, and that will satisfy most people. Once the majority is satisfied, the tour leader may focus on details, if the clients ask questions.

At best, good tour leaders should exude local and general knowledge, and enthusiasm. This is best achieved by an intimacy with the area, developed over time. At the very least, a geotours leader needs a clear great set of notes, location details, photographs with explanations, videos, and good advice prepared by somebody who has spent time in the field, and understands the audience-to-be, daily logistics, and the timetabling of the tour.

To appreciate the level required to satisfy most non-geological travelers, the geology tour books written by Mc Phee, 1986 set the level for the majority of geotourists – very interesting and totally understandable.

Ecotour and geotour leaders should take responsibility for the locations they visit, paying particular attention to the total protection of the environment.

All educational tours improve with the tour leader's knowledge. The broader the knowledge, the better is the tour. Conversely, a badly informed leader is a disaster; poor quality and inappropriately presented information can seriously damage the sustainability of a tour operator's business.

In Japan, coach drivers are prevented from speaking while driving. That's necessary on Japan's narrow congested roads, where drivers need 100% concentration. Every coach has a young female tour guide, who organises the clients, and reads a scripted commentary tailored for known points. Travellers do not expect her to know more than what's in the script. The script is unchanging, no questions are asked.

In contrast, some Australian operators have used graduate leaders. They both drive the vehicle, and discuss the passing scenery. They are generally highly regarded by customers, becoming good traveling companions, and represents a good social experience. However, the role of driver/commentator/mentor is very stressful, resulting in higher staff turnover.

In summary, the Japanese system is safer, but the tightly structured commentary and lack of interaction and discussion does not work well, particularly for western tourists. The Australian driving/commentary system is tiring and potentially dangerous, particularly on long runs. However Australian commentary is excellent, and flexible, but tour leaders can burn out, so

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 13 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome[©] there is a pressing need to separate the driver and commentator functions, or geotours will be difficult to staff.

With changes, geotourism can provide career paths for young science graduate leaders travelling to the more inaccessible areas catering for younger adventurous travellers. Retired worldly, capable, geologists wishing to maintain their interests in retirement should conduct tours for people of similar age and broad knowledge. However, for experiential tours, guides do need to be well trained in a broad range of natural science disciplines combined with proficiencies in culture and heritage. In some areas, the necessary skills may not be found in single individual and a team approach will be required – these considerations will of course flow back into the product pricing.

Educational Considerations

The experience of David Roots as Chairperson of the HSC Geology Examination Committee has revealed a desperate need to upgrade the qualifications of Earth Science teachers in high schools. For most teachers, too much time has elapsed since they were themselves students. Many teachers are teaching society and environment subjects without ever having done any geology, and certainly not any fieldwork. They are therefore at a disadvantage on student excursions, and are reluctant to admit lack of knowledge. Many are keen to fix the problem, provided they don't have to admit that there is a problem. They would like to know what's new in the science.

The geotour market could be greatly enhanced by facilitating tours for teachers that are rewarded by the issuing of a diploma. This could be done through, for example, the Insearch section of UTS, which facilitates entry of students into university, issuing them with a diploma at about the same level as would be required for a teacher refresher course. This market needs to be approached in a way that does not embarrass teachers, and have the levels adjusted to ensure their diploma led to both increased pay and promotion.

Conclusions

- 1. Geotourism is ecologically sustainable tourism.
- 2. Introducing a 'geo' component to ecotours can broaden the range of locations open to such tours. This in turn will relieve stress on the most sensitive areas, while allowing an increase in tourist numbers.
- 3. Outstanding geotour locations world-wide are numbered in the tens of thousands, while ecotour locations number in the thousands.
- 4. Geotourism, if positioned as a supplementary knowledge-adding product within an attractive ecotourism experience will attract affluent 'over 45 y.o.' professionals, their partners and friends through alumini and professional interest groups.
- 5. For geotourism to be sustainable in the long-term, marketing needs to carefully consider all components of the overall marketing mix i.e. the five Ps of product, place, price, promotion and people.
- 6. Potential alumni interest groups include those focused on both the geoscience and other professions, including those with career interests quite different from geoscience. Additional alumni can include organised social and community interest groups.
- 7. The opportunity exists for geoscience-related, professional societies to take a lead role in nurturing the development of geotours, both domestically and globally for their members.
- 8. The selection and training of tour leaders is a key ingredient to the success of geotours.
- 9. Geotourism can also assist in re-educating society and environment/science teachers in pleasant (non-classroom) environments, adding field experience often lacking, possibly also offering them a Diploma to assist advancement in their profession.

Presented at the Inaugural Global Geotourism Conference, Fremantle, WA, 17-20 August 2008 14 Extract from Conference Proceedings, edited by Ross Dowling and David Newsome© 10. Courses in geotourism can provide school and university teachers in the physical sciences/environmental sciences with alternative career paths, providing re-training opportunities for teaching and potentially for a rewarding, part-time and paid retirement occupation.

References

Australian Government (2004). Tourism White Paper. Tourism Australia. Canberra.

Buckley, R (2003). *Environmental inputs and outputs in ecotourism; geotourism with a positive triple line?* Journal of Ecotourism, 2(1), pp. 76-82.

Canning S. (2008). Boomers the neglected goldmine. The Australian, 22 May 2008, p. 31. Sydney.

Coenraads Robert R. and Koivula John I. (2007). *Geologica*. Penguin Group (Australia), Melbourne.

Commonwealth Department of Tourism (1994). *National Ecotourism Strategy*. Commonwealth of Australia. Canberra.

Hossain A., Heaney L. and Carter P. (2005). *Cultural Tourism in Regions of Australia*. Tourism Research Australia. Canberra.

Joyce E. B. (2006). *Geomorphological Sites and the New Geotourism in Australia*. Geological Society of Australia. Melbourne.

Lang R. (2003). *Geotourismus and Geotopschultz in Rheinland-Pfalz*. Landesamat für Geologie und Bergbau Rheinland-Pfalz (available at http://www.lgb-rlp.de/geotop.html).

Maxwell J. (2008). *Packed with Experience*. The Australian Financial Review, 6 June 2008. Sydney.

McKeever P., Larwood J. and McKirdy A. (2006). *Geotourism in Ireland and Britain. Geotourism*. Elsevier. Oxford, pp.193-197.

McPhee John A. (1986). Rising from the Plains. Noonday, Canada.

Megerle, A.and Megerle H. (2002). Geotourism? Geotourism! Attempto, 13, pp.16-17.

Pforr C. and Megerle A. (2006). *Geotourism: a perspective from Southwest Germany*. Geotourism. Elsevier. Oxford, pp.120-121.

Robinson, A. M. and Flett T. (1989). *The design of a visual language for the Geological and Mining Museum*. Museums Association of Australia Inc., Victorian Branch. Annual Conference papers, pp. 145-150.

Smith William L. (2006). *Experiential Tourism Around the World: Definitions and Standards*. International Journal of Services and Standards 2006, Vol.2, No. 1, pp. 1-14.

Stroud Dick (2005). *The 50-Plus Market*. Kogan Page Limited. London (available at http://www.20plus30.com).

Tourism Research Australia (2007). International and national visitor surveys. Canberra.

Tourism Research Australia (2008). Through the Looking Glass: The future of domestic tourism in Australia. Canberra.