

## References

- Hamilton-Smith, E. (1985). *Improving the Visitor Experience*. In Williams, D. R. and Wilde, K. A.,(eds.). Proceedings of the Sixth Australasian Conference on Cave Tourism and Management, Waitomo, New Zealand September 1985. (<http://ackma.org/Proceedings/proceed/06/smith2.html>)
- Hamilton-Smith, E.; McBeath, R. and Vavryn, D (1997). *Best Practice in Visitor Management*. In Smith, D.W., (ed.). Proceedings of the Twelfth Australasian Cave and Karst Management Association Conference, Waitomo, New Zealand May 1997, Australasian Cave and Karst Management Association. (<http://ackma.org/Proceedings/proceed/12/bestpractice.html>)
- Tourism and Events Queensland (2017) *Extraordinary Experiences Through Storytelling-Unlocking the Secrets of Successful Storytelling* (<https://cdn1-teq.queensland.com/~media/33F638F4E30F4155874D9BEA1CE66F13.ashx?vs=2&d=20180320T163015>)

# Nature Tourism and Natural Assets – Naracoorte Caves Continuity as a key Regional Tourism Experience

Chaka Chirozva<sup>1</sup> and Nicholas McIntyre<sup>2</sup>

Department for Environment and Water, Naracoorte Caves National Park, P.O. Box 134 Naracoorte SA 5271

Email: [chaka.chirozva@sa.gov.au](mailto:chaka.chirozva@sa.gov.au)<sup>1</sup> [Nicholas.McIntyre@sa.gov.au](mailto:Nicholas.McIntyre@sa.gov.au)<sup>2</sup>

## Abstract

Naracoorte Caves National Park is well positioned to fill market demand in response to the increased interest arising from Nature Tourism promotion occurring at both a State and National level. Historically the caves have always had a place in the social fabric of the local community and maintain an important economic role. Starting with the colourful Christmas parties held in Blanche Cave in the 1860s, the role of the caves in recreation and leisure has risen significantly over the past decades. Many former staff and stakeholders have consciously promoted Naracoorte Caves as a drawcard in the Limestone Coast region providing a unique tourist attraction whilst recognising the need to strike a balance between preserving the natural authenticity of caves. The SA government and its tourism arm, the South Australian Tourism Commission (SATC), pin their tourism hopes on further developing iconic tourism sites like Naracoorte Caves because of its unique heritage listing. To this end, SATC has supported several infrastructure projects at Naracoorte including construction of the Rooftop Loop Walk trail, installation of new directional and informative wayfinding and interpretation signage around the Park, the Wonambi Visitor Centre upgrade and recently commenced Victoria Fossil Cave Visitor Precinct upgrade. The Naracoorte Caves brand is differentiated from anything else in the State. As a result, there is a strong regional and community-based platform using the site to target tourism growth while capitalizing on the nature-based tourism potential of the World Heritage Listing. The Naracoorte Lucindale Council (NLC) recognised the strategic significance of Naracoorte Caves for contributing to social and economic benefits to their area and initiated a project titled 'Caves Connection'. NLC has installed seven fossil-themed signs on major road entrances into the district to improve vehicular wayfinding for visitors and tourists throughout the district and promote Naracoorte as the home of megafauna fossils. NLC have also coordinated art workshops, exhibitions and live performances promoting heritage education and visitation. Naracoorte Caves continues to be a regional drawcard

in the tourism visitor economy for both the state and region recording ongoing growth in visitation. The future looks good for the Naracoorte Caves with coordinated capital investments and community participation in tourism, research and planning attracting new visitation, repeat visitation and over time increasing the overall market share.

## Introduction

Naracoorte Caves National Park is the only World Heritage listing in South Australia. In 1994, UNESCO jointly inscribed Naracoorte Caves and Riversleigh in Queensland onto the World Heritage register as the Australian Fossil Mammal Sites (AFMS). An international World Heritage Committee assessed the sites for their outstanding natural universal values and deemed them to be amongst the most priceless and irreplaceable locations on Earth. Despite being over 2000km apart, each site provides significant evidence to the evolution of Australia's unique animals including the extinct megafauna. The caves at Naracoorte have acted as pitfall traps for unsuspecting animals. One of the unique features of the Naracoorte Caves fossil locality is the presence of several caves across multiple sites, each with fossil deposits useful for understanding how biodiversity in the region has changed over time. Paleontological research at Naracoorte has uncovered and described several megafauna providing significant insights into timing and likely causes of extinction in the Late Pleistocene (Grealy et al., 2016; Macken, Prideaux & Reed, 2012; Prideaux et al., 2007).

Researchers used the fossil deposits at Naracoorte Caves to reconstruct ancient environments and how these may have changed over time (Laslett, 2006). For Naracoorte Caves, World Heritage listing goes beyond science to include elements of the natural setting, presentation, conservation and significance of heritage listing within the local community. Apart from the fossil values, Naracoorte Caves is also an important site for the critically endangered Southern bent-wing bat. The early European settler community also used Naracoorte Caves as a site for recreation, education and science.

Naracoorte Caves as the only World Heritage site listed in South Australia along with its unique fossil record provides a great opportunity to increase both regional and site visitation and associated economic activity using existing infrastructure. In addition to the World Heritage status, there is also further opportunity to build upon research activity and associated industry and community interest to unlock other private and public income generating activities. Whilst the Naracoorte Caves is a 'jewel in the crown' of regional tourism assets and can effectively stand-alone to attract its own tourism market, greater opportunity exists in working with other private and public organisations to increase the 'length of stay' within the State thereby multiplying the economic benefits to the regional economy.

The Natural and Heritage values preserved at the site are key aspects of the visitor experience both now and into the future. In providing visitation services and building opportunity around the caves it is important to manage the natural and historical site values which are underpinned by legislation:

1. World Heritage Convention and Operational Guidelines for the Implementation of the World Heritage Convention.
2. National Intergovernmental Agreements for endangered species and flora listed at the site – EPBC Act 1999.
3. State Legislation relevant to all aspects of the site – National Parks and Wildlife Act 1972.
4. Statutory Plan related to specific site management – Naracoorte Caves National Park.
5. Natural Resources Management Act 2004 – Pest animal and plants along with water.
6. Statutory Plan relating to site water licensing – Lower Limestone Coast Water Allocation Plan.

Over the years, both Federal and State governments have invested heavily in regional destination promotion and product development. Some of the initiatives funded over this period sought to develop Naracoorte Caves as a tourist attraction and contribute to the preservation and education of visitors on its World Heritage values. In this paper, we briefly focus on the significance of nature-based tourism and heritage in SA. We then focus on how stakeholder engagement could improve destination image and attractiveness through leveraging the World Heritage listing. Thereafter, we focus on key projects implemented at Naracoorte to drive tourism

demand and create new visitor experiences for persons with disability (PwDs). In the last section, we focus on how monitoring reviews on social network platforms such as Trip Advisor can give an understanding of tourism consumption decisions and visitor experiences while at Naracoorte Caves National Park.

### **Nature-based tourism and significance of heritage in SA**

The Department for Environment and Water (DEW) has been working with the SA government tourism arm, the South Australian Tourism Commission (SATC) and other regional tourism bodies in planning and marketing to integrate heritage assets into tourism opportunities. DEW recognises that to effectively market heritage tourism in South Australia, there is a need to leverage the various market segments that exist using strategies and targets in the *South Australian Tourism Plan 2020* and focus on our 'unique experiences', food and wine and unspoilt nature.

DEW plays a critical role in promoting heritage-listed places located within national and conservation parks as part of the State's Nature-based Tourism Strategy. SA promotes visitation to fossil and geological heritage sites such as Ediacaran deposits in the Flinders Ranges and megafauna fossil sites at Naracoorte Caves. Regionally, visiting National Parks features highly in visitation trend research conducted by SATC (2014-2016) with 21% of people nominating a National Park visit as an activity they undertake. Annual visitation to the Limestone Coast during the time of the study was 550,000 with most visitors nominating Naracoorte Caves as an interesting place to visit.

A 2008 report *Economic Activity of Australia's World Heritage Areas* for the Australian Government indicated that Naracoorte contributes \$6 million in annual direct and indirect state output or business turnover, \$2.8 million in annual direct and indirect state value added and 47 direct and indirect state jobs (Department of Environment, Water and Natural Resources, 2015). Over the past decade visitation at Naracoorte Caves National Park has continued to grow with about 70,000 cave tours sold in 2017. Visitor numbers to Naracoorte Caves are usually higher on weekends than on weekdays, with peak visitation on longer public holidays and school holidays. Generally, nearly half of the visitors to Naracoorte use accommodation within 50 kilometres of the park on the day they visit.

This visitation contributes to expenditures at local businesses with some surveys showing that for every

dollar spent on cave tours, that there is a further visitor spend of more than \$10 on accommodation, food, fuel and other leisure activities. Regional Development Australia in 2011 shows an average expenditure by a domestic overnight visitor of \$344 (South Australian Centre for Economic Studies, 2012). This has continued to rise over the years with the most recent statistics released by the SATC showing an average of \$383 expenditure per domestic overnight visitor. With the average regional accommodation occupancy from 2014-16 at 45%, it is apparent that opportunity exists to target those segments of the market that would have an overnight stay.

Below we focus on how stakeholders in Naracoorte and the region are promoting investments to spur tourism growth and expenditure.

### **Community rallying behind Naracoorte Caves**

The development of tourism destinations requires strong stakeholder commitment especially for emerging tourist regions that depend on heritage for the core tourist product (Aas, Ladkin & Fletcher, 2005; Dwyer et al., 2009). In many instances, the success and competitiveness of small to medium tourism businesses rest on how they respond to the external environment including whether they develop new products for the tourism supply chain (Hampton, 2005; McCamley & Gilmore, 2017). In this section, we focus on how Naracoorte Lucindale Council (NLC) is encouraging stakeholders to explore business and tourism opportunities from having a World Heritage site on their 'doorstep'.

In 2016, the NLC initiated the Naracoorte Caves Connection Project. This is a Council led initiative aimed at improving the community and economic benefits associated with the World Heritage values of the Naracoorte Caves. The Project developed a 10-year Concept Statement that proposes opportunities to grow the local economy, through promoting increased visitation and encouraging new infrastructure, commercial development, and to grow businesses, partnerships and jobs. The project's priority actions include developing a business prospectus to encourage investment in tourism, installation of wayfinding advice and plans, setting up interpretive drive trail features and improving branding. To achieve these strategic outcomes, NLC convened a stakeholder workshop in November 2017 to promote innovative ideas for growing tourism and branding using Naracoorte Caves as a central theme.

The 32 participants attending the workshop agreed on the need to develop a range of product/experience ideas around the themes of food and beverages, tours and experiences, events and public spaces, accommodation and souvenirs and gifts. At this workshop, stakeholders also agreed to offer a prize of \$3,000 for the first person or business to generate \$1,000 in sales out of any of the Cave related business idea or any other idea.

NLC also participated in a local business Open Night held at Naracoorte Caves in November 2017. The purpose of the Open Night was to re-acquaint businesses and organisations with the World Heritage site and its tourism value. Twenty-five (25) participants attended the session experiencing scintillating music in Blanche Cave and re-discovering what was on offer at the site. At this business familiarization tour, Dr Liz Reed explained the scientific value of the site in Alexandra Cave. Guests also had a close encounter with the Southern Bent-wing bats, finishing the evening with some suitably cave related canapés using majority locally grown and sourced produce from the café and Wrattontully wines. NLC have also coordinated art workshops, exhibitions and live performances promoting heritage education and visitation.

The Naracoorte Caves site has also supported the NLC Council initiative by playing a support role to foster entrepreneurial ideas from within the community. These ideas include the creation of themed food products sold by the café, encouraging new product development from within the community for sale at a range of outlets, encouragement of special events at the site and supporting the arts.

### **Wayfinding promoting heritage**

NLC engaged Elevation Design to provide advice on improving vehicular wayfinding for tourists throughout the Naracoorte district. Improved wayfinding sought to attract tourists travelling through the Limestone Coast to explore Naracoorte's Town Centre and to ensure there is adequate wayfinding between the Naracoorte Town Centre and Naracoorte Caves. Such infrastructure is required to service a tourism region and for destination level promotion. NLC has installed seven fossil-themed signs on major road entrances into the district to improve vehicular wayfinding for visitors and tourists throughout the district and promote Naracoorte as the home of megafauna fossils.



Fossil Themed Boundary Sign. Photo: Rachel Haynes.

That NLC is playing such a key role in the decision-making process in relation to heritage tourism development is commendable given local stakeholders often make significant contributions to the heritage tourism supply chain (Smith & Xiao, 2008). In future, NLC also plans to develop other interpretive drive trail features contingent on improvements on Old Caves Road. Discussions are still in their infancy to establish a “pop up” fossil museum in Naracoorte Town. NLC promotes a museum situated in Naracoorte Town, as it would enhance the sense of arrival for tourists while simultaneously highlighting the Megafauna fossil record and associated research findings at Naracoorte Caves.

### **Rooftop Loop Walk Promotes Increased Visitations and PwDs Access at Naracoorte**

Persons with disability (PwDs) experience numerous practical and social difficulties that constrain their full participation in tourism (Lee, Agarwal & Kim, 2012; Yau, McKercher & Packer, 2004). For their travel, PwDs often go beyond the purchase of a packaged tour as they often encounter a range of mobility constraints while on holiday. Such limitations are

especially pronounced in a specific physical environment such as subterranean caves. In this paper, we adopt the definition of disability as an outcome of the interaction of impairments, whether in hearing, vision, or mobility, or activity limitations and restriction of participation in a specific environment. Therefore, promoting PwDs access means making it possible for those who cannot go into a cave for various reasons (less abled or vision impaired, those with claustrophobia and those who cannot afford to purchase a subterranean cave tour) and families with young children and the general population.

The Australian Government’s Tourism Demand Driver Infrastructure (IDDI) program provided funding for tourism infrastructure to drive regional tourism demand and create new tourist experiences. The Australian Government and State Government provided funding for a range of projects around the State under the third round of this program including upgrading facilities at Naracoorte Caves. The Australian Government provided \$600,000 and the State Government provided \$785,000. Implemented

in three parts with a total value of \$1.4 million, the Naracoorte Caves Visitor Precinct Upgrade aimed to increase visitation and promote PwDs access at Naracoorte Caves. The first part involved completing a walking trail ‘the Rooftop Loop Walk’ including viewing platforms, lighting, seating and safety fencing. The second part involved the extension of the trail to the Wet and the Cathedral Caves. The third part involved the design, production and installation of interpretation and wayfinding signage across the Main Visitor Centre Precinct and along the Rooftop Loop Walk, as well as new main entry signage. Work has also progressed to improve the above ground infrastructure and experience at the Victoria Fossil Cave.

In a previous article, Craven-Carden (2016) emphasised the importance of interpretation at specific nodes on the Rooftop Loop Walk. Based on insights by Timothy and Boyd (2015) we illustrate how the construction of the Rooftop Loop Walk is a classic example of the development of a “trailscape”.

Purposive trail development occurs when features, attractions, nodes (specific stops along the route) are created for tourists and consumers (Timothy and Boyd, 2015). Through theming, the Rooftop Loop Walk uses the different nodes to provide physical and perceptual linkages between specific components of the caves that might not be previously apparent.

In following a set route on the Rooftop Loop Walk, visitors are accepting the expert interpretation on existing panels (Solnit, 2002). However, in practice, these interpretation panels only act as small vignettes prompting visitors to imagine other possibilities and linkages. Placed at strategic nodes on the Rooftop Loop Walk, the interpretation panels cover a range of themes such as marine transgression, the role that many organisms play in the creation, modification and maintenance of habitats, ecology of bats, as well as the contribution of notable historical figures in the discovery, description and conservation of caves at Naracoorte.



Bat Cave Observation Platform. Photo: Chaka Chirozva.



**Blanche Cave Interpretation and Cave Markers. Photo: Chaka Chirozva.**

The Rooftop Loop Walk is a Class 1 classification and meets disability and access requirements. It shows different colour codes on the trail with a dark coloured bitumen showing where the walk crosses a

cave and light-coloured limestone scalps where the trail is not over the cave. Cave markers are also installed showing the name of the cave.



**Different colour scheme and Cave Markers at Alexandra Cave. Photo: Chaka Chirozva.**

Themes engage visitors and promote Naracoorte Caves as an important site for science and research while emphasising its significance as a National Park and World Heritage Site. The Rooftop Loop Walk increases visitors' and local communities' appreciation and active engagement with tour experiences at Naracoorte. Going forward a segmented marketing approach will likely increase demand by PwDs and other demographic groups to enhance their participation in tourism. Growing demand in this sector does not have any negative effects on the cave environment. In future, the use of innovative sensory signage such as Virtual Reality (VR) achieved by Head-mounted Displays (HMD) could complement existing interpretation on the trail. Other innovative sensory interpretation can also be used for heritage education and offer visitors a range of experiences at the caves in Naracoorte.

## **Tourism consumption in the age of Travel 2.0**

Online reviews are now a popular source of information as tourists use information from reviews to make travel decisions (Munar & Ooi, 2012). Tourism consumption decisions occur on sites such as Trip Advisor, Yelp.com and Yahoo travel, which afford users an opportunity to post reviews or recommendations on their travel experiences. In particular, thematic social network sites such as Trip Advisor have now become a useful tool to understand how individual tourists are using and sharing their experiences of both natural and cultural heritage (Ramírez-Gutiérrez, Fernández-Betancort & Santana-Talavera, 2018). This section briefly demonstrates how the comments submitted by users on Trip Advisor provide unique perspectives on what Naracoorte Caves mean to visitors.

From over four hundred comments on Trip Advisor Naracoorte has an average rate of 4.5/5.0. Positive reviews focus on visitors' experiences of the tour guiding with comments such as "very knowledgeable guides", "a memorable trip", "guide was terrific and very entertaining" and "Knowledgeable and passionate staff". In other comments, visitors also provide advice on how guides handled tours involving young children. Other reviews indicate that Naracoorte is a "must see" attraction because of its heritage listing and value for money. By interacting on the web, visitors can show their preferences about products, thereby creating electronic word of mouth (e-WOM). Potential travellers review these opinions and recommendations and often change their buying

processes especially where comments reveal specific details of destinations or products offered.

Travellers' recommendations on Trip Advisor influence other travellers' choices about different facets of their trips (Filieri, Alguezaui & McLeay, 2015). For Naracoorte Caves, this could include selecting the park itself as a place to visit, what cave tour(s) to buy and opinions on food offerings at the onsite Café. Studies show tourists are more likely to trust reviews submitted on online platforms like Trip Advisor than the official content provided by destinations and property owners (Zeng & Gerritsen, 2014). Therefore, periodically reviewing visitor comments on Trip Advisor can help both staff and management at Naracoorte to understand tourist behaviours especially their perceptions of quality of tour guiding experiences as well as the on-site café. For example, some visitors posted reviews pointing to the pricing disparity on café food while some visitor on a cave tour reported that one cave tour did not provide value for money because it appeared rushed and delivered by a trainee tour guide. Given the scalability and speed of diffusion of user reviews on Trip Advisor, it is important for staff, site management and destination marketers to keep track of visitor opinions especially how they rate or recommend the overall experience from tours, cost of tours, tour guiding and the food sold in the café. Research at Naracoorte is promising new and exciting directions, which can contribute to cave interpretation on site. A 4-year Australian Research Council Linkage Project is set to provide excellent opportunities for communication outreach and contribute important best-practice management guidelines to the site.

## **Concluding remarks**

As work is occurring to develop the region further as an emerging tourist destination, businesses in the Limestone Coast region can leverage the World Heritage Listing of Naracoorte Caves as part of the region's core tourist offering. Stakeholders in emerging destinations must not only be committed to work together to understand the tourism product but also are prepared to make necessary investments for its growth. The TDDI investments at Naracoorte Caves improve tourism experiences through the provision of high-quality facilities and interpretation to service the needs of visitors and provide an opportunity to increase the length of stay, leading to the desired increase in visitor spending. The ability for local government and private operators to leverage opportunity from the site and create a positive impact on local businesses that service these

park visitors, both in Naracoorte and in the region more broadly is considerable.

The SA government is making strategic investments to build a strong tourism product that focuses on unique heritage to offer richer tourist experience and increase tourism expenditure. Opportunities for promoting further growth exist through engagement with the range of stakeholders including local business and tourism associations, scientific and arts community, local government bodies, regional and state tourism bodies. For Naracoorte, such efforts can build on the momentum already generated by the

Interagency Reference Group – a community governance structure responsible for providing support at a strategic and operational level to fulfil obligations under the World Heritage Convention. Businesses in Naracoorte Caves can derive long-term benefits by investing in opportunities that increase the tourism visitor economy and market share.

### Acknowledgements

We extend special thanks to Sally Klose of Naracoorte Lucindale Council for providing information on the Caves Connection Project.

### References

- Aas, C.; Ladkin, A. and Fletcher, J. (2005). *Stakeholder collaboration and heritage management*. Annals of Tourism Research, **32**(1). pp 28-48.
- Craven-Carden, D. (2016). *Naracoorte Caves National Park Visitor Facility Upgrades*. Journal of the Australasian Cave and Karst Management Association, **105**. pp 28-31.
- Department of Environment Water and Natural Resources. (2015). *Exploring heritage - tourism opportunities in South Australia: Discussion paper*. State Heritage Unit: Department of Environment, Water and Natural Resources.
- Dwyer, L.; Edwards, D.; Mistilis, N.; Roman, C. and Scott, N. (2009). *Destination and enterprise management for a tourism future*. Tourism Management, **30**(1). pp 63-74.
- Filieri, R.; Alguezau, S. and McLeay, F. (2015). *Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth*. Tourism Management, **51**. pp 174-185.
- Grealy, A.; Macken, A.; Allentoft, M. E.; Rawlence, N. J.; Reed, E. and Bunce, M. (2016). *An assessment of ancient DNA preservation in Holocene–Pleistocene fossil bone excavated from the world heritage Naracoorte Caves, South Australia*. Journal of Quaternary Science, **31**(1). pp 33-45.
- Hampton, M. P. (2005). *Heritage, local communities and economic development*. Annals of Tourism Research, **32**(3). pp 735-759.
- Laslett, T. M. (2006). *A palaeoecological study of a Quaternary vertebrate fossil deposit in Blanche Cave, Naracoorte, South Australia*. (BSc (Hons) ), Flinders University, South Australia, Adelaide.
- Lee, B. K.; Agarwal, S.; and Kim, H. J. (2012). *Influences of travel constraints on the people with disabilities' intention to travel: An application of Seligman's helplessness theory*. Tourism Management, **33**(3). pp 569-579.
- Macken, A. C.; Prideaux, G. J. and Reed, E. H. (2012). *Variation and pattern in the responses of mammal faunas to Late Pleistocene climatic change in southeastern South Australia*. Journal of Quaternary Science, **27**(4). pp 415-424.
- McCamley, C. and Gilmore, A. (2017). *Aggravated fragmentation: A case study of SME behaviour in two emerging heritage tourism regions*. Tourism Management, **60**. pp 81-91.
- Munar, A. M. and Ooi, C. (2012). *What social media tell us about the heritage experience*. Copenhagen: Copenhagen Business School.
- Prideaux, G. J.; Roberts, R. G.; Megirian, D.; Westaway, K. E.; Hellstrom, J. C. and Olley, J. M. (2007). *Mammalian responses to Pleistocene climate change in southeastern Australia*. Geology, **35**(1). pp 33-36.
- Ramírez-Gutiérrez, D.; Fernández-Betancort, H. and Santana-Talavera, A. (2018). *Talking to others: analysing tourists' communications on cultural heritage experiences*. International Journal of Heritage Studies, **24**(6). pp 634-648.
- Smith, S. L. and Xiao, H. (2008). *Culinary tourism supply chains: A preliminary examination*. Journal of Travel Research, **46**(3). pp 289-299.

Solnit, R. (2002). *Wanderlust: A history of walking*. Penguin. London.

South Australian Centre for Economic Studies. (2012). *Regional Development Australia Limestone Coast*. Adelaide: South Australian Centre for Economic Studies.

Timothy, D. J. and Boyd, S. W. (2015). *Tourism and trails: Cultural, ecological and management issues*. Channel View. Bristol.

Yau, M. K.-s.; McKercher, B. and Packer, T. L. (2004). *Traveling with a disability: More than an access issue*. *Annals of Tourism Research*, **31**(4). pp 946-960.

Zeng, B. and Gerritsen, R., (2014). *What do we know about social media in tourism? A review*. *Tourism Management Perspectives*, **10**. pp 27-36.