

Using Photo-Elicitation to Explore Place Attachment in a Remote Setting

Joanna Tonge¹, Susan Moore¹, Maria Ryan² and Lynnath Beckley¹

¹School of Environmental Science, Murdoch University, Perth, Australia

²School of Marketing, Tourism and Leisure, Edith Cowan University, Perth, Australia

j.tonge@murdoch.edu.au

s.moore@murdoch.edu.au

m.ryan@ecu.edu.au

l.beckley@murdoch.edu.au

Abstract: People are often attracted to unique natural environments, but what makes them continually return to these locations, especially when considerable time and effort are required to get there? This paper discusses the methods and findings of a research project aimed at identifying and exploring how visitors develop an attachment to the remote Ningaloo Marine Park in north-western Australia. This Marine Park attracts a high percentage of repeat visitors (55%) and in order to determine the complex aspects contributing to this attachment, photo-elicitation was employed. Photo-elicitation is a qualitative technique where participants are asked to take photographs relating to the concept under study, and these are then used as triggers for underlying memories and feelings during a subsequent interview. For this study, participants were provided with digital cameras to take photographs of why they like visiting the Ningaloo Reef and what it was that made them return. Given this remote location and the inability to get photographs developed in reasonable timeframes, digital cameras were used instead of the disposable cameras more commonly used in this type of study. After a few days, the cameras were returned, and photographs uploaded on the researcher's laptop computer with interviews conducted while viewing the photographs. Over a period of four weeks, during the peak visitor period, 30 participants took over 200 photographs and provided over 15 hours of interview recordings. Key aspects contributing to place attachment included the beauty of the physical environment, reef and marine based activities, social bonding with family and friends and enjoying a challenging though rewarding experience. By using a technique familiar to people on holidays, i.e. taking photographs, a method was invoked that people could engage with easily without the research impinging on their holiday experience.

Keywords: photo-elicitation, photographs, interviews, marine, place attachment, remote location

1. Introduction

This paper reports on a novel methodology to examine and describe the relationships between people and place in a remote marine park in north-western Australia. Ningaloo Marine Park is located over 1,000km from the capital of Western Australia, but is still a popular destination for marine-based activities such as swimming, surfing, snorkelling and diving with many visitors returning year after year. Therefore, as the primary research population was people enjoying their leisure time, a method that was as unobtrusive as possible on visitors' experiences, while still providing information, was needed. Photo-elicitation using digital photographs taken by visitors to the Marine Park and subsequent interviews onsite proved to be a suitable technique, especially given the constraints of remoteness and unobtrusiveness while at the same time providing comprehensive information on peoples' relationships with Ningaloo Marine Park. The first part of this paper provides a rationale for examining place concepts in a remote marine setting, and is followed by an explanation of why photo-elicitation was a suitable technique. Included are details on why the technique was used, despite the tyranny of distance, and how this issue was overcome through the use of digital cameras and onsite interviews. Key aspects contributing to peoples' relationship with the Marine Park are also examined. The paper concludes with a discussion of the appropriateness and effectiveness of this technique in remote setting where knowledge is urgently required on the relationships between people and place.

2. The choice of photo-elicitation for Ningaloo Marine Park case study

Ningaloo Marine Park contains one of the largest fringing coral reef systems in the world and provides visitors with the opportunity to visit a unique marine environment relatively easily with only a shallow lagoon separating the reef from mainland Australia (Cassata & Collins 2008). Although the Marine Park is located approximately 1,200km north of Perth, the capital of Western Australia (Figure 1), approximately 200,000 people visit annually to participate in a range of nature-based activities including swimming, snorkelling,

fishing, boating and diving (Beckley, Smallwood, Moore & Kobryn 2010). A recent comprehensive survey of how people use the entire 300km length of the Marine Park identified that 55.2% of survey respondents had visited on a previous occasion and of these, 43.8% always stayed at the same location (Beckley et al 2010). But what is it that makes these visitors continually return to this remote Marine Park and even the same site time after time? One possible explanation explored in this study is place attachment, a concept that has emerged as a promising focus for exploring the relationships people have with their surrounding environment (Koons Trentelman 2009).

In exploring the attachment between visitors and their environment in this remote location, a number of research logistics were salient. As place attachment considers the relationship people have with specific locations, on-site rather than off-site methods were more suitable. In addition, the method chosen had to be able to provide the in-depth responses required to fully articulate people's attachment. Finally, visitors to the Ningaloo Reef region have been subject to numerous surveys as part of a national scientific research focus on the region (Beckley et al 2010) and there was a sense that visitors were being 'over researched'. Therefore the technique employed needed to ensure the detailed information through engaging visitors was obtained without them feeling their holiday experience was being impinged upon.

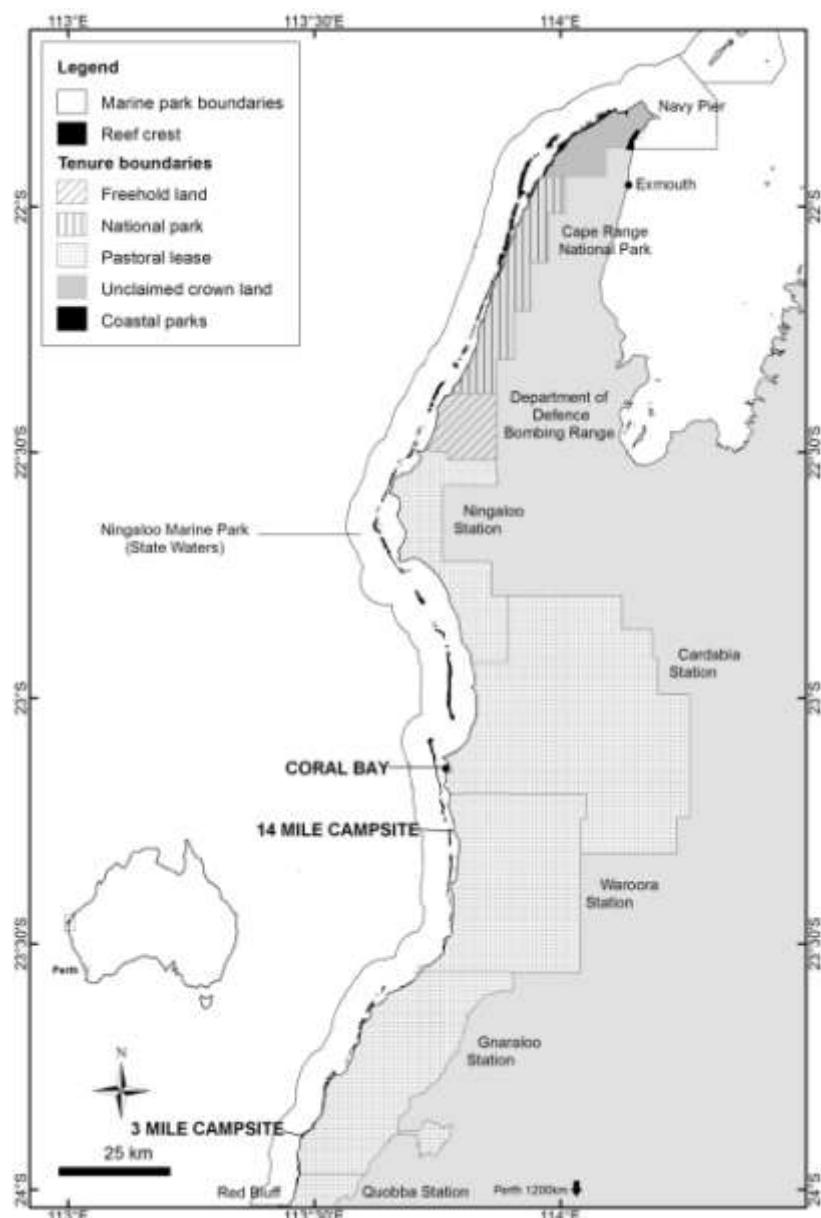


Figure 1: Map of Australia showing location of Ningaloo Marine Park and Perth, capital of Western Australia and Ningaloo Marine Park showing study site locations

2.1 Place attachment

Place attachment studies have been informed by a number of research traditions including philosophy, psychology, geography, sociology and natural resource management. For natural resource management, place attachment seeks to understand what type of experiences make people value places, what they seek when going or indeed returning to particular places and why some people may visit a particular place and others do not (Manzo 2008). A place can be described as a spatial setting that has been given meaning based on the experiences that people have there. These symbolic meanings underpin place attachment whereby people attribute meanings to a location and in turn people become attached to these locations (Stedman 2003; Stedman, Beckley, Wallace & Ambard 2004). As such, place attachment reflects the strong bonds which form between a person and a location (Smaldone, Harris & Sanyal 2008; Stedman et al. 2004).

Much of the natural resource management place literature has arisen from attempts to convince managers of the need to include the human, meaning-orientated dimensions of place in management decisions regarding recreational settings on publically-managed land (Koons Trentleman 2009). The emotional attachment that forms between a person and place usually involves strong sentiments that see them unwilling to substitute their 'place' for another and often results in heightened concerns about how the places are managed (Gunderson & Watson 2007; Williams 2008). It is important to understand these complex relationships to places as these insights assist in the effective and sensitive management of natural resources (Manzo 2008).

Qualitative research methods have been successful in exploring the make-up of people's relationships with places. Such methods are more sensitive to the intricate distinctions in the meanings ascribed to places than quantitative measures (Manzo 2008). However, simply asking someone to outline "why are you attached to this place?" may not reveal the extent of the experiences and information that went into forming their attachment (Beckley, Stedman, Wallace & Ambard 2007). This has led some place researchers to experiment with visual methods to help articulate what constitutes peoples' attachment to places. For example, Beckley et al. (2007) used resident-employed photography, a form of photo-elicitation, to help residents communicate what formed their attachment to their communities.

Visual research methods have been used as a research strategy for studying the inter-related aspects of people's lived experiences by allowing them to express themselves in diverse ways (Dennis, Gauloche, Carpiano & Brown 2009). There are a variety of approaches in visual research methods ranging from those that have a high level of researcher intervention (e.g. researchers choose images) to those with a high level of participant input (e.g. participant creates or collects images). The method employed in this study was photo-elicitation, which is based on the simple premise of inserting a photograph into an interview (Harper 2002; Loeffler 2004; Rose 2007).

2.2 Photo-elicitation

First named by John Collier in the 1950s (Harper 2002; Loeffler 2004; Rose 2007), photo-elicitation was devised to illustrate categories of housing to study participants in his study on mental health in changing communities (Harper 2002). Since then it has been used to conduct research in anthropology, education, community health, psychology, sociology and natural resource management (Loeffler 2004). In most cases, participants are provided with a camera and asked to take photographs to illustrate their interpretation of the subject or theme of interest to the researcher (Garrod 2008; Rose 2007). The photographs are then used as stimuli in a subsequent interview to evoke or elicit responses of a greater emotional depth than those that may have been prompted by more traditional interview methods (Jacobsen 2007).

The very act of framing the photograph assists participants to see their everyday experiences in new ways (Dennis et al. 2009). They reflect the participants' point of view, their biases and experiences and can also act as a memory trigger by preserving a moment in time. This helps the participants to sharpen reflections on their experiences and resultant discussion (Loeffler 2004). Photographs also capture a greater amount of detail than participants can remember on their own. Images can evoke deeper elements of people's experience than words alone to provide a greater understanding of the concept under study (Loeffler 2004). The meaning or the intent behind the images is not always apparent simply by looking at them (Stedman et al 2004) and often it is only through the accompanying interview and discussion that the information inherent in the images can be obtained by the researcher (Rose 2007). In addition, discussing the images can often prompt further

conversation on other related issues (Rose 2007) or enable respondents to express feelings they may have found hard to verbalise through traditional interview methods (Garrod 2008).

The success of the photo-elicitation method can be attributed to a number of factors, including that the research process is often an enjoyable experience for both the participants and the researchers (Beckley et al. 2007). For the participant, the research task of taking photographs is an enjoyable and familiar activity (Stedman et al. 2004) and, being task-orientated, participants engage deeper into research about their own experiences (Dennis et al. 2009). This can increase their initial willingness to participate and their subsequent engagement with the research process (Garrod 2008; Stedman et al. 2004). In addition, the interview focuses on the photographs rather than the participant, which can remove some of the pressure of being interviewed from the participant. It also provides an opportunity for participants to feel valued in a non-evaluative and non-judgemental environment (Dennis et al. 2009). Finally, the researcher becomes the listener while the participant interprets the images (Loeffler 2004).

3. Applying photo-elicitation to Ningaloo Marine Park case study

3.1 Study sites

Three study sites in the southern section of Ningaloo Marine Park (Figure 1) were selected as fewer studies have been undertaken in this area because it is more difficult to access, with two of the sites requiring a four-wheel drive vehicle. The first study site, Coral Bay, is a small township with a major focus on providing tourism experiences including glass-bottom boat tours, fishing charters and four-wheel drive tours (WAPC 2004). The two other study sites are located on pastoral (sheep) stations which abut the coastline boundary of the Marine Park, 3 Mile Campsite on Gnaraloo Station and the 14 Mile Campsite on Warroora Station. The 3 Mile Campsite offers beachside camping with unpowered sites and simple facilities including bore-water showers and toilets with basic laundry and cleaning facilities. The 14 Mile Campsite on Warroora Station provides coastal camping at its most basic. All visitors must be self-sufficient in relation to water, food and power as no facilities are provided.

3.2 Data collection

The photo-elicitation research process was undertaken on-site over a four week period in July 2009, with approximately a week to ten days spent at each of the three study sites. July was chosen to coincide with the peak visitor period (Beckley et al 2010). Adult visitors at each of the three sites were approached and asked if they had stayed at the site at least twice previously, as attachment to a place starts to develop after one visit (Gunderson & Watson 2007). If the visitor met this criterion, and agreed to participate in the study, they were provided with a camera and asked to take six to eight photographs of what makes the place special for them. An instruction sheet outlining what was required of them as well as contact details for the researchers was provided at the time of camera handover. A general interview time (e.g. day, morning or afternoon) was also agreed upon at this time.

The interviews were conducted in a semi-structured manner, with a list of questions to act as probes determined *a priori* but not strictly adhered to in terms of the order or exact wording. The interviews began with a brief description of the participant's socio-demographic details (gender, life-cycle stage etc) and their travel group type (family, friends, etc). An in-depth discussion of the photographs followed to capture the intent and meanings behind the images. Further questions were asked to clarify responses or to follow up on interesting aspects. Interviews were digitally recorded for transcription upon return from the field. At the conclusion of the interview, participants were provided with a CD containing their photographs.

3.3 Analysis

The photographs taken by the participants were coded to describe their content. The researcher consulted the interview transcripts for the participant's description of the photograph, e.g. "beach fishing" or "family sitting around the campfire". Once initial coding of all photographs was complete, these were then rolled into the overarching categories adapted from the place attachment literature - recreational activities, social situations and the physical environment. Then each was categorised as being marine or terrestrial in nature. To illustrate, a photograph of fishing rods in the sand on the beach (as per Figure 2) ended up being coded as "recreational activity – marine". However, due to the nature of some the photographs, they were given two codes. For

example, people on a boat was described as “marine – recreational activity” and “marine – social situation”. The researcher did not see the photographs before the interviews as they were loaded onto the laptop computer at the time of the interview. Coding of the photographs was undertaken prior to coding of the interview transcripts.

The interviews were transcribed verbatim and were then read individually to allow the researcher to obtain a general understanding of the content before undertaking coding. Coding, the classification of individual pieces of data (Babbie, 2005), identified key blocks of text which could then be conceptually placed in categories or themes (Garst, Williams, & Roggenbuck, 2010). Once key blocks of text and categories were identified, each interview was then re-read to ensure consistency across all transcripts and to expand or condense categories as required. This was undertaken using the QSR N’Vivo (version 2.0) software program. The coding of the photographs informed the coding of the interview transcripts in addition to the natural resource management literature associated with place attachment and place meanings.

3.4 Studying place attachment in a remote setting

Given the remote location and difficulty in accessing the study sites, it was not feasible to use disposal film cameras, as has been the approach in other photo-elicitation place studies. A considerable amount of time would have been lost in travelling to the nearest towns (at least 100km away) to get the films developed for use in the subsequent interviews. Staying in remote locations is costly; therefore time management was a crucial part of the research design. As such, digital cameras helped overcome this issue. Such cameras allowed the photos to be uploaded onto the researcher’s laptop computer for viewing during the interview process.

As all digital cameras are different in the way they operate, tags were attached providing instructions in how to take, view and delete photographs. The researcher’s name and telephone number were also included, with the researcher staying on-site to assist with any technical difficulties or queries (e.g. changing batteries, etc). Digital cameras may also help to overcome the sampling bias proposed by Jacobsen (2007) in relation to film cameras. As film cameras only have a fixed number of exposures, participants may not take all the photos that represent their experience. They may take too many photographs of one particular aspect and not have any exposures left to capture some other important aspect at a later time. Alternatively, they may not take photos of some aspects of their experience, concerned that they may not have an exposure left for the perfect shot later on. Digital cameras allow participants to take as many photographs as they wish as there are no fixed number of exposures, they can then choose from these those best representing their experience.

4. Results

A total of 30 participants across the three study sites contributed to this study. The participants were part of three different types of travel groups – family (47%), couples (33%) and with friends (20%). Over half of the participants (57%) were from Perth, 23% from regional Western Australia and the remainder from interstate and overseas. Most participants (70%) visited at least once per year, followed by more than once per year (23%) and once every two years (7%).

4.1 Overview from the photographs

Participants took 207 photographs with the most provided by one participant being 16, the least, three. The types of photographs included landscapes, seascapes, beach scenes, family gatherings, fishing rods, surfboards and sunsets. Following coding of the photographs, three overarching categories were evident – the physical environment, recreational activities and social situations, examples of which are provided in Figure 2.

The marine aspects of the physical environment dominated the photographs, with 82% being marine-based (Table 1). There was a more equal split between marine and terrestrial for recreational activity and social situations (Table 1) which suggests the adjacent hinterlands are important for these participants as they use both environments.

Analysis of the photographs and interviews together followed, as the meaning of photographs is elaborated and built upon in the accompanying stories (Garrod 2008, Loeffler 2004). This integrated analysis provided a fourth category – emotional connections with Ningaloo Reef – additional to the previously identified physical environment, recreational activities and social situations.



Figure 2: Examples of participants' photographs illustrating the three overarching categories of the physical environment, recreational activities and social situations.

Table 1: Categorisation of participants' photographs

Photograph category	Description	Total*	Marine-based (% of Total)	Non marine-based (% of Total)
Physical environment	Contains aspects of environment, can include people but predominant feature is physical environment	94	82	18
Recreational activities	People participating in a recreational activity OR containing equipment to undertake activity	78	41	59
Social situations	Groups of people interacting, not based around a recreational activity	102	43	57

* - Photos were placed in more than one category, as such sums to 274 rather than 207

4.2 Physical environment: Beauty in remoteness

The remoteness of the location and coastline free from people provided an escapist feeling. With the surrounding environment being so expansive, they enjoyed the impression of a wild environment, untamed by humans:

"That is in the lagoon (Figure 3), wild place, with this light in the background, with just wilderness..."

Participants enjoyed being able to visit a location, which through geography and lack of human presence, gave the feeling of isolation and escape from their busy everyday lives. Being able to put psychological and geographical distance between themselves and their normal everyday life (Korpela & Hartig, 1996) and being in a natural setting provided a reduction in visitors' stress and anxiety (Garst et al 2010). The naturalness of the setting helps to give these places an "escape" feel rather than more developed or populated places that lend themselves to a "social" feel (Stedman, 2003).



Figure 3: Participant's photograph showing the lagoon

4.3 Recreational activities: Reef-based activities

Participants enjoyed being able to undertake their favourite reef and marine based activities, such as surfing, fishing, snorkelling and diving in a convenient location so close to shore.

"We like the snorkelling. It is an amazing reef, you just go out there a couple of 100 meters and you have got an amazing coral reef. You can't do that anywhere else." (Coral Bay participant)

Some of these marine-based activities, such as surfing (Figure 4), formed their main reason for visiting – “we are here to surf” (3 Mile participant). One participant even indicated that if the surfing conditions were not right and their friends did not come, they would not visit the Ningaloo Reef region at that time:

"The surf as well, but if you said why wouldn't you come back, it would be onshore (wind) and none of the friends would turn up, if we knew that the surf was not going to be on and none of our friends would be here, that would be our criteria for nah, no, not going..." (3 Mile participant)



Figure 4: Surfing is an important aspect of some participants' experiences

Recreational activities are an important component in the development of place attachment (Eisenhauer, Krannich & Blahna 2000). The convenience, accessibility and ability of the place to facilitate desired activities can help to build visitors' attachment. Often visitors participating in activities requiring specific types of places, such as good surfing locations as per this study, may exhibit greater levels of attachment than an indifferent visitor (Farnum, Hall & Kruger 2005).

4.4 Social situations: Maintaining family bonds

Many participants commented that they saw holidays as an important opportunity for them to spend time with their children, especially when the everyday stresses of life made it hard to do this in their home environment. There were also a number of activities that they could participate in as a family, which helped to maintain and reaffirm bonds:

"No, no it is not the fishing, it is the mix of things. Sort of being a family away from the emails and all of that sort of thing, the diversity of things, snorkelling on the reef would be quite high on the list and that is something I can do with anybody in the family" (3 Mile participant)

After travelling to the same location year after year, traditions can begin to form. What started off as a family holiday with relations developed to the second and third generations as the 'original' children grew up and started having families of their own.

"Researcher (R): And the families all come up at the same time of year do they?"

Participant (P): Yeah, it is second and third generations coming up now

R: So this is sort of a real family catch-up for you

P: Yes, cousins, aunties, uncles...

R: Did you originally start the tradition?

P: We started it many years ago with my brother-in-law and my husband's sister and two sisters, their husbands and their kids. And then their kids married..." (Coral Bay participant)

Travelling and holidays are often part of a family tradition (Lee, 2001), and as families continually visit the same site, positive interactions and memories become associated with it, forming significant meanings of place (Brooks, Wallace, & Williams, 2006).

4.5 Emotional connection: Challenging but rewarding experience

Another strong aspect related to the effort and planning required coming to the Ningaloo Reef region and having a holiday – *"holidays here are hard work, getting here and all the rest of it"* (14 Mile participant). Rather than detracting from the experience, this seemed to add to the enjoyment due to the challenge it provided – *"that probably adds to the experience, that you have to plan ahead"* (Coral Bay participant). Having to work for the experience was also seen as a mechanism that protected the participants' experiences from being over-run by busloads of tourists or outsiders, spoiling the isolated and remote character of the locations:

"but I think to seriously enjoy it you have got to go to a bit of effort, if the need for that effort is taken away, then we are going to see busloads [of tourists]" (3 Mile participant).

Overcoming obstacles and challenges to stay at these sites, such as large travelling distances and bringing enough food, water and shelter, provided a sense of fulfilment for participants. The effort put in to planning and preparing for the trip resulted in the reward of having wonderful experiences in these remote locations. The essence of a place can be expressed and constrained through the effects of the physical parameters (Sampson & Goodrich, 2009), such as a place that is hard to get to or a place that is remote with few or no facilities. Places can be characterised by the opportunities they provide as well as by the limits they impose on human behaviour and social activity (Sampson & Goodrich, 2009).

5. Review of photo-elicitation research method

5.1 Place attachment

This work shares a number of similarities with other natural resource management studies (e.g. Eisenhauer et. al (2000), Smaldone et al. (2008)) in the aspects contributing to place attachment, i.e. the physical environment, recreational activities, social situations and emotional connections. Visitors to natural

environments are drawn by and depend on the physical environment (Manzo 2008) and one which allows them to undertake specific or desired activities (Jacobsen 2007). Additionally the physical environment can instil a sense of escape, relaxation or achievement in overcoming limitations in visitors. And, the spatial setting provides the opportunity to reaffirm social relationships and reconnect with family and friends (Garst et al. 2010).

5.2 Photo-elicitation as a method

Visitors in this study were very amenable to taking photographs, possibly as this is often an activity undertaken on holidays. Scheduling interviews a few days after the cameras were distributed appeared to keep the purpose of the study at the forefront of participants' minds and provided lively and in-depth discussion of the photographs taken. From the review of the photographs taken, it became apparent that the participants valued the physical environment, particularly marine, as an attraction. Also apparent was the significance of the adjacent beach and hinterlands as a locale for participating in activities and facilitating social situations. Participants obviously value both the marine and terrestrial settings.

As mentioned in the Methods, the researcher conducting the interviews did not see the photographs beforehand. Such an approach minimises any inherent bias resulting from the researcher having developed preconceived ideas about the photographs and participants' association intentions prior to the interviews. This also added to the enjoyment of the participant and the researcher as the photographs were viewed together for the first time on the laptop computer. Participants were also encouraged to provide as much discussion of the photographs as they wished, generating in-depth and emotive responses from the participants.

Photo-elicitation does, however, have limitations. Aspects that are difficult to photograph such as sounds, smells or even the emotions felt at the time cannot be adequately represented (Dorwart, Moore & Leung 2006). Interpretation of photographs also relies heavily on what is seen or captured in the photograph, but what about those aspects that are not captured? Indeed, what events, aspects would go un-photographed because of the type of setting, limitations of equipment or the nature of the activity (Loeffler 2004). In this study, the cameras provided were not water-proof; so participants could not take photographs underwater. To try and overcome this limitation, an interview question was included asking participants to indicate whether there was anything they couldn't photograph. However, this question may not always accurately capture the meanings inherent in such uncaptured images.

Finally, while using digital cameras overcame a number of limitations associated with conducting research in a remote setting, their use may not be applicable in every situation. Procuring the cameras, memory cards and batteries is costly. There is also the probability of not receiving all of the cameras back once participants have taken their photographs. Thankfully, this was not an issue for this study which may have been influenced by the researcher staying on-site and being highly visible around the campsites. This may not be possible in a more 'open' study location or in more highly populated campsites.

6. Conclusion

Photo-elicitation is an effective tool for investigating people-place related constructs as often the elements participants are asked to photograph are things they may have been inclined to photograph anyway (Beckley et al. 2007). It has been proven successful in investigating how people make sense of and comprehend the environment around them (Dennis et al. 2009) by empowering the participants to take some aspect of control of the research process resulting in richer and more meaningful data on people-place constructs (Dorwart et al. 2006). The use of modern technology, digital cameras and laptop computers, allowed for this under-utilised technique to be applied in a remote setting. This study provides another example of the successful application of visual methods contributing to the continued advancement of people-place theory.

References

Babbie, E.(2005) *The Basics of Social Research*, 3rd ed. Thomson Wadsworth, Belmont, CA.
 Beckley, L.E., Smallwood, C.B., Moore S.A. and Kobryn, H.T. (2010) "Ningaloo Collaboration Cluster: Human use of Ningaloo Marine Park". Ningaloo Collaboration Cluster Final Report No. 2. 166 pp.
 Beckley, T., Stedman, R.C., Wallace, S., and Ambard, M. (2007) "Snapshots of What Matters Most: Using Resident Employed Photography to Articulate Attachment to Place", *Society & Natural Resources*, Vol. 20, no. 10, pp 913-29.

Brooks, J.J., Wallace, J.J., and Williams, D.R. (2006) "Place as a Relationship Partner: An Alternative Metaphor for Understanding the Quality of Visitor Experience in a Backcountry Setting," *Leisure Sciences*, Vol. 28, no. 4, pp 331-49.

Cassata, L., and Collins, L.B. (2008) "Coral Reef Communities, Habitats, and Substrates in and near Sanctuary Zones of Ningaloo Marine Park," *Journal of Coastal Research*, Vol. 24, no. 1, pp 139-51.

Dennis, S. F., Gaulocher, S., Carpiano, R.M., and Brown, D. (2009) "Participatory Photo Mapping (Ppm): Exploring an Integrated Method for Health and Place Research with Young People", *Health and Place*, Vol. 15, no. 2, pp 466-73.

Dorwart, C. E., Moore, R. L., & Leung, Y.-F. (2006) "Visitor Employed Photography: Its Potential and Use in Evaluating Visitors' Perceptions of Resource Impacts in Trail and Park Settings", Paper presented at the 2006 Northeastern Recreation Research Symposium, Bolton Landing, NewYork.

Eisenhauer, B. W., Krannich, R. S., & Blahna, D. J. (2000) "Attachments to Special Places on Public Lands: An Analysis of Activities, Reason for Attachments, and Community Connections", *Society & Natural Resources*, Vol 13, No. 5, pp421-441.

Farnum, J., Hall, T., & Kruger, L. E. (2005) *Sense of Place in Natural Resource Recreation and Tourism: An Evaluation and Assessment of Research Findings* (Report No. PNW-GTR-660), US Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, Oregon.

Garrod, B. (2008) "Exploring Place Perceptions: A Photo-Based Analysis", *Annals of Tourism Research*, Vol. 35, no. 2, pp 381-401.

Garst, B.A., Williams, D.R. and Roggenbuck, J.W. (2010) "Exploring Early Twenty-First Century Developed Forest Camping Experiences and Meanings", *Leisure Sciences*, Vol. 32, no. 1, pp 90-107.

Gunderson, K. and Watson, A.E. (2007) "Understanding Place Meanings on the Bitterroot National Forest, Montana", *Society & Natural Resources*, Vol. 20, no. 8, pp 705-21.

Harper, D. (2002) "Talking About Pictures: The Case for Photo Elicitation", *Visual Studies*, Vol. 17, no. 1, pp 13-26.

Jacobsen, J. K.S. (2007) "Use of Landscape Perception Methods in Tourism Studies: A Review of Photo-Based Research Approaches", *Tourism Geographies*, Vol. 9, no. 3, pp 234-53.

Koons Trentelman, C. (2009) "Place Attachment and Community Attachment: A Primer Grounded in the Lived Experience of a Community Sociologist", *Society & Natural Resources*, Vol. 22, no. 3, pp 191-210.

Korpela, K. and Hartig, T. (1996) "Restorative Qualities of Favorite Places", *Journal of Environmental Psychology*, Vol. 16, no. 3, pp 221-33.

Lee, C.C. (2001) "Predicting Tourist Attachment to Destinations", *Annals of Tourism Research*, Vol. 28, no. 1, pp 229-32.

Loeffler, T. A. (2004) "A Photo Elicitation Study of the Meanings of Outdoor Adventure Experiences", *Journal of Leisure Research*, Vol. 36, no. 4, pp 536-56.

Manzo, L.C. (2008) "Chapter 7 - Understanding Human Relationships to Place and Their Significance for Outdoor Recreation and Tourism", In *Understanding Concepts of Place in Recreation Research and Management*, edited by Linda E Kruger, Troy Hall and Maria Stiefel, US Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, Oregon.

Rose, G. (2007) "Chapter 11: Marking Photographs as Part of a Research Project - Photo-Elicitation, Photo-Documentation and Other Uses of Photos", In *Visual Methodologies: An Introduction to the Interpretation of Visual Materials*, Sage Publications, London.

Sampson, K.A., and Goodrich, C.G. (2009) "Making Place: Identity Construction and Community Formation through "Sense of Place" in Westland, New Zealand", *Society & Natural Resources*, Vol. 22, no. 10, pp 901-15.

Smaldone, D., Harris, C. and Sanyal, N. (2008) "The Role of Time in Developing Place Meanings", *Journal of Leisure Research*, Vol. 40, no. 4, pp 479-504.

Stedman, R.C. (2003) "Is It Really Just a Social Construction?: The Contribution of the Physical Environment to Sense of Place", *Society & Natural Resources*, Vol. 16, no. 8, pp 671-85.

Stedman, R.C., Beckley, T., Wallace, S. and Ambard, M. (2004) "A Picture and 1000 Words: Using Resident-Employed Photography to Understand Attachment to High Amenity Places", *Journal of Leisure Research*, Vol. 36, no. 4, pp 580-606.

Western Australian Planning Commission (WAPC). (2004) "Ningaloo Coast Regional Strategy: Carnarvon to Exmouth", Western Australian Planning Commission, Perth.

Williams, D.R. (2008) "Chapter 2 - Pluralities of Place: A User's Guide to Place Concepts, Theories and Philosophies in Natural Resource Management", In *Understanding Concepts of Place in Recreation Research and Management*, edited by Linda E Kruger, Troy Hall and Maria Stiefel, US Department of Agriculture, Forest Service, Pacific Northwest Research Station, Portland, Oregon.