International Handbook on Ecotourism

Edited by Roy Ballantyne and Jan Packer

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11. Visitor behaviour in ecotourism settings
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INTRODUCTION

In contemporary psychology, as well as in applied areas such as consumer studies, the term behaviour embraces both the experiential world of the individual (decisions, emotions, beliefs, attitudes, memories) and their overt behaviour (acts, interactions and movements). The full scope of these interests is daunting. For the purposes of reducing the scale of the task, this review attends only to what we can see visitors doing. This attention to overt behaviour should not be taken as implying that the inner world of the visitor is not important (Cutler & Carmichael, 2010; Pearce, 2011, pp. 5–6). For a consideration of the experiential world of the visitor other reviews in this Handbook offer directions of interest.

Furthermore and also in accord with the orientation of this volume, we are most interested in observable visitor behaviour in ecotourism settings: that is, locations that can be classified as strong in natural and cultural values and where some clear interpretive signals are provided that these settings matter (Black & Weiler, 2003, p. 22; Garrod, 2003). The trajectory of the review proceeds by considering how information is collected about overt visitor behaviour. Next, five core considerations are presented. These defining issues are, in turn, the value of studying the topic of what visitors do; the interpretation of the intentionality of behaviours; the power of exploring the use of space in ecotourism settings; and the analysis of behaviour over time. The fifth consideration is a brief overview of the key management strategies available to those who are charged with the stewardship of ecotourism settings. As a codicil to these considerations, two succinct cases studies illustrating the challenges of visitor behaviour management are presented using original data collected by the author. The first case study is that of Flinders Chase National Park, Kangaroo Island, South Australia, an ecotourism setting with strong natural values. The second site is Hidden Valley Cabins, North Queensland, a setting with a well-defined sustainability agenda.

RESEARCHING OVERT VISITOR BEHAVIOUR

There are three principal pathways to accessing what people do. First, researchers can directly observe visitors' behaviour. This activity of 'people watching' has diverse and deep roots (Collett, 2004). Prior to the development of social science analysis, literary and philosophical commentators portrayed many of the foibles and follies of public behaviour (Argyle, 1975; Morris, 1985). The early social science observational work on human societies was conducted by anthropologists, such as Malinowski (1922 [2006]) and sociologists such as Goffman (1959). Their studies highlighted the value of keeping detailed records and tracking what people did as well as what they said about

their worlds. Other contributions to the practice of good observational analysis derive from the ethologists (Eibl-Eibesfeldt, 1989; Hinde, 1972). Since axiomatically animals do not speak, the ethologists' efforts to study animal behaviour have relied exclusively on careful observation and have been instrumental in devising predictive mathematical models of behavioural sequences (Ball, 2004).

For our interest in visitor behaviour it can be suggested that direct behavioural observation is of particular value under the following circumstances: where the research phenomena cannot be compartmentalized and studied in laboratories, for example, crowd behaviour; where there is a need to describe behavioural patterns and movements through space; where the interest is in non-verbal behaviour, particularly facial expressions, laughter, gestures and posture; where the behaviour is illegal or anti-social and thus unlikely to be readily reported; and where people cannot reliably report their own behaviour such as when they are drunk or drugged. Additionally, even outside of these circumstances much behaviour is simply difficult to recall, such as how much time was spent in specific spaces within a setting. For many of these naturalistic, socially sensitive, time- and space-dependent recall tasks, there is an advantage to watching public behaviour rather than asking questions about it (Gomm, 2004; Pizam, 1994).

A second pathway to observing visitor behaviour lies beyond the task of directly watching people and involves the use of electronic or visual records. Hidden cameras and videos, electronic beams, heat-sensitive indicators of human presence and various tracking devices can be employed. This kind of study has a somewhat 'detective/spy novel' flavour and is subject to close scrutiny by ethics boards and review panels. There has been a rising interest in analysing tourists' photographs, video footage and Web 2.0 records for research purposes in the last decade and some of this interest has implications for researching overt visitor behaviour (Rakic & Chambers, 2012). For example, an analysis of the content of photos taken by visitors on their iPhones may lead to the identification of behaviours that might take many hours to observe directly because of privacy or timing issues. In particular, unsafe or foolhardy behaviours in dangerous natural environments may be identified more readily in this way rather than staking out the site and waiting to see what people do (Heggie & Amundson, 2009). A third and somewhat subsidiary route to observing visitor behaviour lies in recording the consequences accompanying public activities (Webb, Campbell, Schwartz & Sechrest, 1966). These unobtrusive measures, which are often referred to as traces, encompass both erosion, such as looking for wear and tear on trails, and accretion, which refers to what is left behind, such as litter and graffiti (Bell, Greene, Fisher & Baum, 1996).

CORE CONSIDERATIONS

Relevance

Armed with information from these varied observational strategies, several issues confront the researcher interested in visitors' behaviour at ecotourism sites. A common question in tourism studies is the importance or relevance of pursuing a particular topic. While one defence is that expanding the knowledge base of any topic of study is an intrinsically worthwhile goal, for visitor behaviour there are some quite pragmatic

answers to this challenge. Managers of tourist sites have to deal with the negative consequences of less desirable visitor behaviour. The literature on ecotourism impacts is rich in studies documenting specific kinds of damage (Edgell, 2006, pp. 41–56; Ryan, 2003, pp. 209–19; Shackley, 1999; Turton, 2005; van Polanen Petel, 2011). Managers may need to take direct action in terms of enforcing legal action or more often attempting to promote more desirable behaviour by social influence processes (Ham, 1992; Moscardo, 1999; Moscardo, Ballantyne & Hughes, 2007; Pastorelli, 2003). In this quest to prevent damage to flora, fauna, landscapes and cultural sites, the effort to study observable visitor behaviour and hence the options for mitigating undesirable outcomes can be a pathway to sustaining ecotourism places.

The negative outcomes of tourist behaviour may capture the most media and public attention, but site managers and businesses are also seeking to shape behaviour that is rewarding and fulfilling to visitors (Bowen & Clarke, 2009; Packer & Bond, 2010; Sax, 1980). Studies of the time spent at sites and the enthusiasm visitors show in exploring places and reading about them in terms of the use of signs are all indicators of consumer involvement and potentially positive and rewarding experiences (Gursoy & Gavcar, 2003). In both considering behaviours that are defined as negative as well as those that managers seek to endorse, a key determining issue is whether or not the behaviour observed is intentional or accidental.

Intentionality

When examining certain classes of observable visitor behaviour some clear questions of intentionality arise. Did visitors mean to break the coral on a delicate tropical reef as a souveniring activity or was it simply an accident due to unskilled behaviour (Townsend, 2003, p. 140)? Were visitors unconcerned about their disposal of rubbish when walking on a long-distance track or did strong winds wreck a campsite and scatter debris in ways making it impossible to reclaim (Turton, 2005, p. 146)? Was the joke made by the individual meant to be insulting to the local guide or was it merely culturally naïve behaviour (Wiseman, 2007, p. 215)? These kinds of questions highlight some of the limitations of simply observing public behaviour.

In a detailed analysis of how we interpret observable behaviour, Morris and Mason (2009) argue that if we see the behaviour as intentional we think like storytellers and suggest motives and reasons and embellish the observed behaviour with personality descriptions. For behaviour we see as unintentional, typically we reason abstractly like scientists and discount the personal issues and resort to situational explanations. These arguments are underpinned by advances in neuroscience that suggest that there are indeed different parts of the brain involved in processing behaviour in our field of vision. One area of the brain involves the superior temporal sulcus (STS) and is activated when we track motion. This has been referred to as body reading. A second region of the brain is activated when perceivers attempt to explain why a person performed an action; this area of the brain is the medial prefrontal cortex and is linked to mindreading (Morris & Mason, 2009, p. 59). The early triggers that we are likely to see the behaviour as intentional and therefore mostly engage in mindreading are when the person we are tracking appears to have planned the action, has the skill to accomplish the goal and appears to be aware of the outcomes achieved.

The value of this preceding discussion lies in how managers treat the behaviours that they are called upon to oversee. If intentionality is inferred, such as when deep tyre tracks at a scenic lookout are seen as evidence of deliberate destructive off-road driving, then the regulatory and informational forces brought into play will have certain characteristics predominantly aimed at changing people's behaviour. By way of contrast, if the behaviour is seen as unintentional and physical parameters of the road surface and its camber are perceived to be at fault, then more direct physical infrastructure interventions to the environment may be invoked. A similar reasoning may be applied to other ecotourism behaviours that are directly observed (such as getting too close to sensitive animal nesting or feeding sites).

Intentionality is one part of the complexity of looking at what people do in time and space. A second level of interpretation consists of thinking about the meaning of the act. A good example lies in the behaviour that we can describe when two people are looking at each other: the case in question is simply the observed movement of one person's upper eyelid closing rapidly and then opening again. In many situational contexts we will refer to this behaviour as winking, although it could simply be blinking. Winks of course are intentional, blinks much less so. More importantly, the meaning of the wink is not just about its intentionality but its intended and perceived meaning that may vary from establishing a basic connection, to participating in some form of social conspiracy or, further still, to outright flirting (Collett, 2004, pp. 139, 264–8).

Clearly, even if we decide that behaviour is intentional, it can still be problematic to proceed further to interpret motives and meaning. For tourism researchers who are often interested in the meaning of what visitors do, it is therefore wise to proceed with considerable caution in interpreting meaning or ascribing meaning to seen behaviour. This caution does not negate the value of looking at what people do but it does direct attention to larger and more molar considerations of the behaviour in time and space rather than focusing on intended meanings.

Spatial Behaviour

One of the foundation studies in natural settings using observation of visitor behaviour was conducted by Robinson (1928 [1978]) in museums in Philadelphia. His work and that of similar studies by Melton (1933, 1936, 1972) established key points about the ways visitors moved through rooms and at attractions. The principles have much relevance for ecotourism settings. Bitgood (2006) summarizes a number of the major findings by considering the earliest studies plus extensive work by Loomis (1987), Falk (1993) and Serrell (1997) as well as his own papers and research collaborations (for example, Bitgood & Cota, 1995; Bitgood & Dukes, 2006; Bitgood & Lankford, 1995). In particular, Bitgood identifies the tendency for people to walk in relatively straight lines. It has been found that walkers only tend to divert occasionally from this pattern when 'pulled' away by highly attractive exhibits. Additionally, people moving through open courtyards tend to approximate straight line movements but do tend to cut the final corners of diagonals as they move in their chosen direction. He also identifies a right turning tendency as people enter rooms but this pattern is contested and may be linked to other cultural behaviours including road rules and driving patterns.

A core part of the overview Bitgood has provided concerning these spatial behaviour

studies of visitors lies in what he terms the general value principle. It can be argued that the choice of viewing exhibits (or parts thereof) is influenced by the actual or perceived benefits of viewing divided by the costs such as physical effort or inconvenience. Many objects are viewed because they are in the visitors' direct path and thus require no extra mental or physical effort. Some exhibits or points near a trail or open space that are especially attractive to individuals may warrant the effort of visitors changing direction and walking further. It is noteworthy here that there is a cognitive explanation – an algebra of supposed mental effort versus attractiveness – invoked in the explanation of the tourists' behaviour (Moscardo et al., 2007, p. 39). The principle may be expanded to model the kind of behaviour seen in both self-drive as well as guided tours of wildlife viewing in Africa. Vehicles generally keep to the tracks but opportunistic sightings of key target species, notably lions, cheetahs and leopards, can cause deviations from the main paths and a rapid clustering of vehicles close to the desired species. The attractiveness effort principle is apparent in these settings because for some visitors the chance to see a member of the 'Big 5' may only occur once in their African travels (Lindsey, Alexander, Mills, Romanach & Woodroffe, 2007).

Other studies of tourists' and people's movements in outdoor environments complement the research undertaken in attraction and exhibition spaces. Ball (2004) comments that people moving in open air spaces behave in ways that are consistent but possibly unknown to them as participants. For example, visitors moving along a wide walking track are likely to proceed in what Ball terms loose counterflowing streams. Typically people moving in opposite directions organize themselves with collision avoiding tactics to preserve their personal space while achieving their directional goals. Mechanistic models of particle flow adopted from core physics principles provide some insights into how these flowing streams behave (Helbing, Molnár, Farkas & Bolay, 2001). It appears, for example, that when restrictions such as vegetation, crossings and narrow sections impede visitors' direct movement trajectories, alternating pulses of small visit groups pass through the common point of restriction. The work of Batty, Desyllas and Duxbury (2003) has demonstrated that when a crisis occurs, such as a fire or flash flood, then the pulsing behaviour of visitors breaks down. In these panic inducing circumstances the interpersonal distances are compressed and the attempts to move faster actually become slower and potentially hazardous.

Wiseman (2007) amongst others has identified the issue of the speed at which people move through spaces. In a series of detailed observational studies on walking speeds in 30 countries, researchers have established that people do walk at consistently different speeds in similar settings (Levine & Norenzayan, 1999). In the latest round of work the fastest walkers are in Singapore and, in the countries studied, the slowest are in Malawi. Citizens of Berlin, New York, London and Guangzhou were amongst the fastest movers. Citizens in Bahrain, Bulgaria and Jordan were more relaxed. The difference was a matter of four seconds across 60 feet. In a race the Singaporeans would beat those from Malawi and Bahrain by 15 feet. Additionally, the pace of walking was also shown to have increased across all the sampled sites, with the standard distance being covered on average 1.2 seconds or 5.5 feet faster in 2007 versus 1999 (Wiseman, 2007, pp. 264–6).

The issue of walking speed may usefully be applied to ecotourism settings. It can be linked to the notion of slow time and the concept of slowness (Honore, 2004). As already

indicated by the walking studies, there is a view that in modern and postmodern cultures, speed and fast-paced living is the norm and is in fact accelerating. The slow movement argument is that there are many activities that are better appreciated and more richly fulfilling if undertaken in a leisurely and low key manner. Participating in ecotourism experiences and taking time to appreciate settings is a good candidate for the application of the ideas of slowness. In particular, the biological rhythms of places may assist individuals to connect to other time horizons and the enduring nature of cultural relics may also prompt reflections on time and slowness.

Molz (2009) emphasizes that those participating in slow tourism seek to live like locals 'establishing local routines, indulging in local cuisines, and becoming connoisseurs of the local culture' (p. 280). The activities enjoyed are simple and can include shopping at local stores, going to the same places each day or taking the time to see attractions that are in the vicinity of the vacation home (Dickinson, 2007). Findings from Dickinson's research suggest that these travellers typically engage more deeply with places and people and that slow travel experiences can be rewarding and relaxing. Dickinson and Lumsdon (2010) note that slow tourism activities involve contemplation of one's type of transport, with desirably low emission forms preferred over airplanes, cruise ships and cars. In these ways slow travel may align with messages about conservation and sustainability present in ecotourism settings.

Time

The concepts of walking speed and slowness act as links to another key topic in observing and understanding visitor behaviour. From the earliest museum studies right through to some of the latest work on technology uses in mobile recommender systems, the assessment of how long tourists spend in settings has been of interest (Kramer, Modsching, ten Hagen & Gretzel, 2007; Robinson, 1928 [1978]). Two key concepts help capture the way time has been treated in visitor observation work. The first concept is holding power, which is normally described as the length of time an individual remains predominantly focused on an object, view or exhibit (Bell, Greene, Fisher & Baum, 1996). A second concept is that of attracting power, which is defined as the percentage of people who stop to view a site or object for some minimum threshold period of time – usually a time period long enough to specify that the individual (or vehicle) has indeed stopped. Some features of ecotourism settings have both high attracting power and high holding power, though it is not uncommon for other combinations to occur. As an illustration, Niagara Falls was once described in a Canadian Tourism Commission report as the best ten minute attraction in the world – a slight on the magnificence of the attraction but an assessment based on its enormous attracting power but limited holding power in terms of a large-scale outdoor attraction (Getz, 1992). An additional concept that is subtle but useful is that of 'passing'. This term refers to visitors who visually inspect the exhibit, site or attraction as they follow their track but do not actually stop. The visitors' walking speed may be reduced and they are not ignoring the site. Instead, they appear to process enough information to make a rapid decision and simply do not find the specific feature appealing enough to cause them to stop.

Time-based records may be used as stand-alone or supplementary records of visitor

interest and help assess the success of component parts of an ecotourism site or interpretive display. Some time ago McManus (1989) advised researchers to be cautious in using mean time as the only measure of visitor attentiveness. She argued that average time scores can strongly mask skewed distributions of time data, with a few visitors spending very long periods of time and many brief periods. This caution should prevent research and textbook writers from making bland statements such as visitors look at signs for say ten seconds. It is more likely that many are involved in passing, some look for 3–5 seconds and a few look for several minutes.

The measurement of time spent at component parts of a site can be brought together with tracking studies. In this kind of work the sequence of visitor movement through space is combined with time spent at component parts of the site (McManus, 1998). The combination of this information can provide a full picture of visitor time–space budgets. Green (1996) provided an interesting application of the approach by examining and tracking how much time visitors spent in various in-water activities versus staying on the catamarans at Great Barrier Reef coral viewing sites. On day trips he observed that many visitors mismanaged their time and often spent the last hour of a three to four hour reef trip sitting on the main vessel as they had miscalculated the timing of their swimming, lunch, snorkelling and glass bottom boat activities.

The value of tracking studies is perhaps underestimated in some ecotourism settings. Often there is assumed knowledge of where visitors spend their time, how much time they spend and in what order they proceed. In one tracking study of visitor centre behaviour it was revealed that visitors spent a mean time of 15 minutes in the interpretive displays. The visitors' own estimates of time spent indicated over half an hour (Pearce, 2007). The possibility of using more time-based appraisals and the sequences of visitor movements may offer managers as well as businesses fresh opportunities to investigate experimentally the details of how their sites work. Additionally, time-based information and tracking studies can check on the value and effectiveness of changes that managers or businesses choose to make.

VISITOR BEHAVIOUR MANAGEMENT OPTIONS

The direct management of visitor behaviour is rarely a stand-alone activity. It is usually set inside policies and frameworks of governmental organizations or acted out within the objectives of a business (Swarbrooke, 1999). Five options that may form part of visitor management systems can be briefly enumerated. They are not mutually exclusive and often work together, particularly at those ecotourism sites that are under the most intense visitor behaviour pressure.

A first option is the development and enforcement of a strong legal framework indicating clearly what visitors can and cannot do within the province of the law. Breaking this law can become a criminal act predisposing the individual to jail or very large fines. Alternatively, transgressing against legal requirements may possibly be classed as a civil infringement involving restitution and community service. A second form of control is the active use of local regulations and rules including identifying zones and creating restricted access areas where only certain specific approved visitor behaviours may take place. Often these regulations involve the visitor paying for permits and access rights

with personnel on hand to check on conformity to the regulatory environment. Another route to desirable visitor behaviour and a common one in many ecotourism settings is that of interpretation. Partly due to the expensiveness of enforcing regulations and partly due to the desire to facilitate the intelligent use of settings, interpretation either through static displays, visitor and interpretive centres or guided tours can influence those who come to experience significant places. A fourth managerial strategy that can be subtly encouraged rather than directly manipulated involves social control; that is, encouraging well-behaved visitors to monitor the less desirable behaviour of others. These techniques either separately or acting in concert can influence not just what people are seen to be doing but also their experience of the settings.

Other chapters in this Handbook pursue the above themes in more detail but they are specified here as a succinct introduction to considering visitor behaviour in two specific ecotourism case studies. One of the advantages of contemplating case studies lies in avoiding the over-generalizations and bland remarks that can prevail when diverse settings are kept in mind. As Diamond (2005) suggests, case studies in social science are naturally occurring experiments and if selected carefully researchers can gain special insights from variations in case study outcomes and comparisons (Eisenhardt, 1989; Yin, 2009).

CASE STUDY ONE: FLINDERS CHASE NATIONAL PARK, KANGAROO ISLAND, SOUTH AUSTRALIA

Kangaroo Island is the ecotourism centrepiece of South Australia. The name of the island, originally bestowed by Captain Matthew Flinders in 1802, is well suited to current ecotourism promotional purposes. The island is rich in Australian marine and terrestrial wildlife including but certainly not limited to large numbers of the local, dark coated kangaroos. It also has a rugged and varied coastline that is directly exposed to the Southern Ocean. A significant amount of visitor attention is focused on Flinders Chase National Park (Figure 11.1), which is an 8000 square kilometre site with rolling vistas of well-preserved native vegetation. The park is bounded to the west and south by a wind-lashed coastline. In the 1980s and 1990s the tourism value of Kangaroo Island with its wildlife and coastal landscapes began to be appreciated. International and domestic visitors both increased rapidly and by the end of the century total visitor numbers exceeded 120 000 annually. The protection of iconic sites such as Seal Bay (the main wildlife site outside the Flinders Chase National Park) and Remarkable Rocks (a much promoted feature inside the park) from visitor pressures posed several challenges. Some of the pressing visitor behaviour issues included unsafe climbing on cliffs and rocky promontories, uncontrolled and disruptive contact with wildlife and erosion damage to vegetation near tracks and car parks. From an experiential point of view, visitors were often disappointed with not being able to see the much publicized wildlife due to the timing of their travels. Further, visitor safety was a public issue with car accidents and deaths by drowning at the Remarkable Rocks site raising issues of managerial responsibility.

Based in part on research conducted by a James Cook University academic team, a new Flinders Chase visitor centre was constructed (Pearce & Moscardo, 2007). The aim
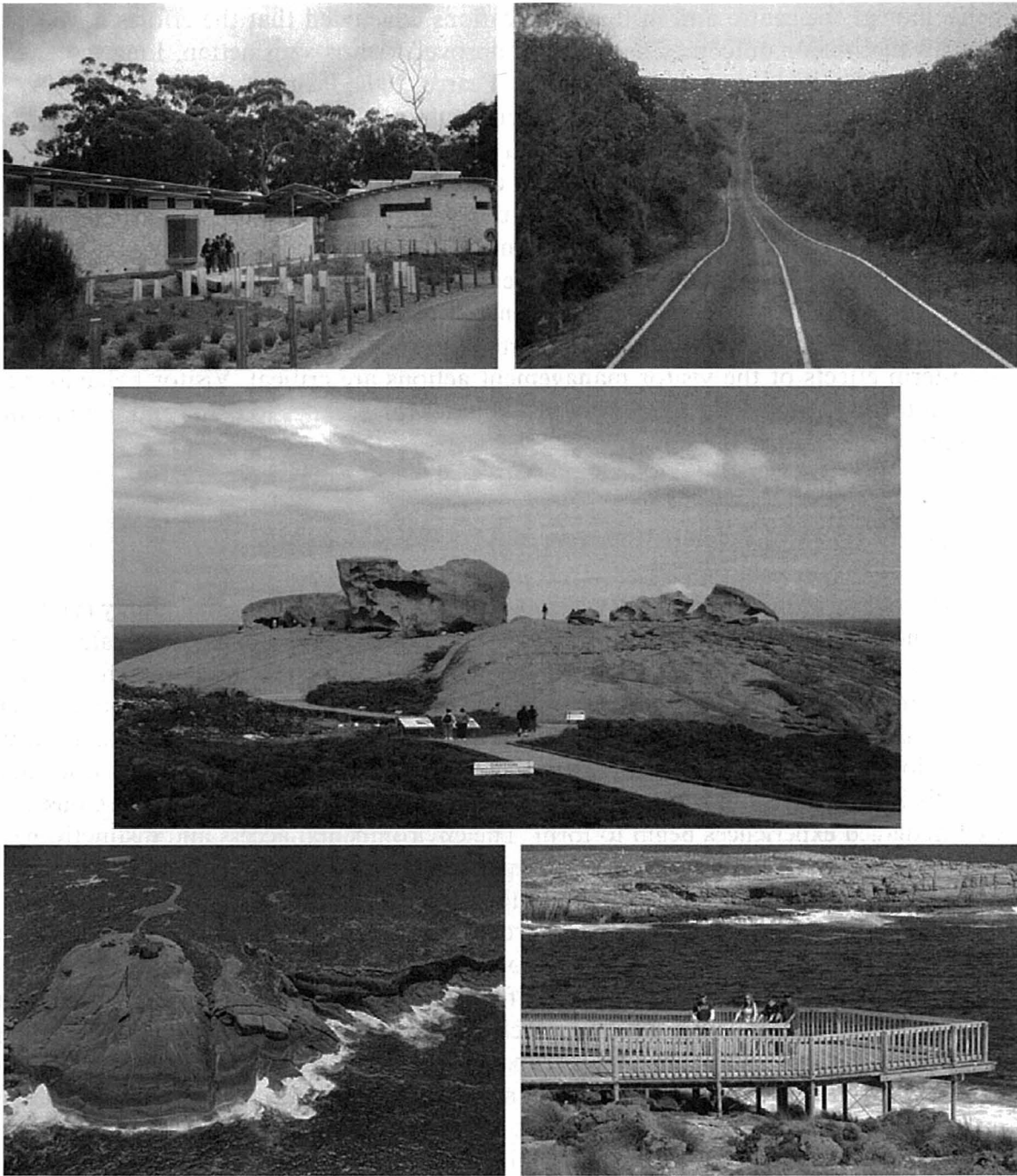
*Figure 11.1   Flinders Chase National Park including Remarkable Rocks, South
Australia*

of the new facility was to provide a starting point and comprehensive information base
for Flinders Chase National Park that could influence individual visitor and group tour
expectations and behavioural choices. An impressive programme of infrastructure addi-
tions coincided with the visitor centre development. Better roads, new wooden coastal
boardwalks and on-site safety and interpretive signage were carefully planned and imple-
mented. Research conducted both through survey analysis as well as by watching visitor

behaviour at the centre and in the key locations concluded that the efforts have been worthwhile: major outcomes have been improved visitor satisfaction, longer viewing times at sites and reduced visitor accidents (Pearce, 2006; Pearce & Moscardo, 2007).

Clear implications about visitor behaviour and its management can be deduced from these government and national park management efforts. It is expensive to implement an integrated set of visitor management changes (the visitor centre alone cost $7.5 million) but a holistic approach works. Tourists new to the site, unlike some locals who recall the location in earlier and simpler times, do appreciate the benefits of contemporary information and enhanced management practices. Knowing where to go, what to do and how to do it is a benefit not a burden provided that there is a subtlety and respect for visitor intelligence embedded in the communication efforts. Not unimportantly, the long-term effects of the visitor management actions are critical. Visitor behaviour at this ecotourism site will be shaped by the facilities for decades to come and not just the present.

CASE STUDY TWO: HIDDEN VALLEY CABINS

The second site of interest is Hidden Valley Cabins (Figure 11.2); a small family run business in northern Queensland (http://www.hiddenvalleycabins.com.au/). The value of the location as an ecotourism experience can be defined in four ways. First, and in common with many other ecotourism sites, the property is small scale. It hosts a maximum of 60 visitors at any one time, and rarely has this many guests. Small-size properties in themselves do not define an ecotourism experience but when that scale of business is located in a distinctive environmental zone the ingredients for environmentally conscious and well-managed experiences begin to form. The environmental access and distinctiveness of the business location is the second component of its ecotourism appeal. The distinctive environment of Hidden Valley is that the business is on the edge of the Wet Tropics World Heritage Area. The main access road provides all guests with a 25 kilometre transect of landscapes and vegetation – from the tropical lowland coast through sclerophyll woodland to the full wet tropics rainforest back into a tall timber sclerophyll zone and on to the Hidden Valley Cabins, which are at the margin of the semi-arid country and the tall eucalypts. This pre-arrival experience sets a context for the low key accommodation in rustic-style cabins. The defining element of the ecotourism experience does not, however, reside in the location and environmental context alone. As a third key ecotourism consideration, and perhaps all importantly, Hidden Valley Cabins have won a number of state and national tourism awards for ecotourism because they were the first location in Australia to be truly carbon neutral. The consequences of this commitment to environmental sustainability principles for guests are considerable. There is a large-scale solar power installation that provides a limited power source for the off-grid destination. The guest rooms have low levels of lighting, limited refrigeration and cooling systems and restricted television and entertainment facilities. The cabins, while modest and comfortable, are cleaned with environmentally friendly materials, the toilets are a part of an on-site recycling system and the irrigation of the limited grass spaces is with grey water. Visitor entertainment in the evenings consists of two options – conversations with the family members in a communal eating space where the hosts provide meals followed
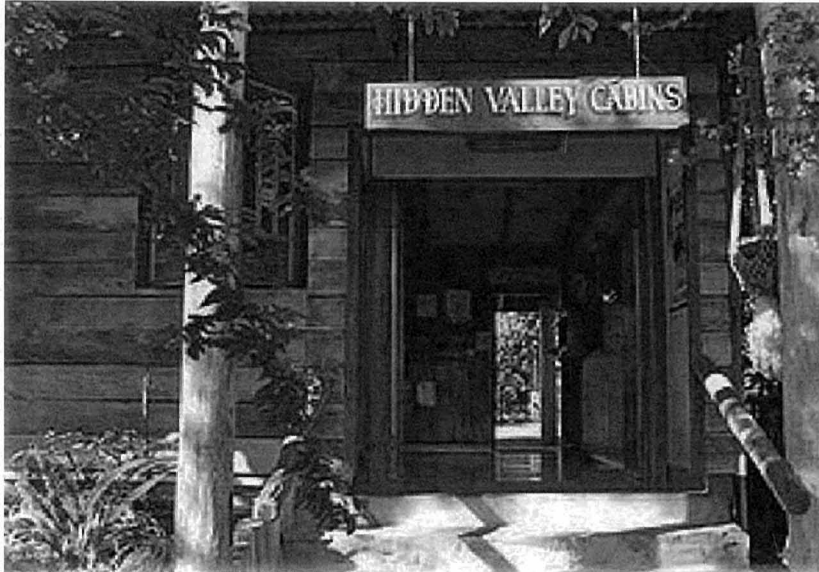
Figure 11.2   Hidden Valley Cabins

by quiet reading and personal activities based around a small pool facility, or guided night-time walks in the local environment. The fourth and final defining element of the ecotourism experience, the importance of interpretation, is carried further for guests with daytime tours supplementing the night-time options. In the daylight hours, tours of a local gorge, inspection of old mining sites and a more extensive tour to an Indigenous tourist attraction are offered. The family's long personal history with the site provides a fund of local stories and events.

Some visitor behaviour responses to ecotourism initiatives can be understood by combining the kinds of direct behavioural observation studies already considered in this chapter with more probing analyses of visitor responses through interview and question-naire material. An understanding of this second case study can be determined through the use of multiple information sources; effectively a mixed methods approach. On-site visits to this ecotourism business have been made on more than five occasions including two periods in which the author was judging the site for tourism awards. The visitor behaviours observed closely on these occasions included noting the hesitancy of some visitors to deal with the modest facilities and their associated lack of media and internet connectivity. Other visitors in conversation and through enthusiastic involvement in the question asking process while on the guided tours were clearly attentive to the environmental setting and curious about the management issues involved in running a carbon neutral operation.

A study exploring the guests' reactions was pursued with the operators' consent to further analyse the visitor experience at this ecotourism site (Daryani, 2008). The design of the study sought to establish immediate and on-site reactions to the carbon neutral initiatives as well as seeking to assess the enduring loyalty to this kind of eco-tourism. The strategy of considering the short- and longer-term visitor reactions was complemented by also considering whether the guests would be prepared to return to this specific property or whether they are or would be attracted to similar styles of operations. This consideration of visitor loyalty thus deals with two issues in visitor behaviour: are visitors loyal to a carbon neutral operation in both the short and long term and is this loyalty localized or does it generalize or transfer to other apparently similar operations? The long-term loyalty was established by using the business records to contact and question previous guests. Immediate loyalty was assessed through ques-tionnaires handed to visitors accessed on-site in a two month period. Over 150 visitors were considered in total, a modest number by some market and visitor satisfaction research standards, but in the context of a small operation with fluctuating occupancy levels, a reasonable spread of types of visitors in terms of age and source of origin was achieved. Survey responses to the detailed questionnaire established both short-term and long-term visitor loyalty; that is, those for whom the experience was arguably now a somewhat distant memory were as enthusiastic as the on-site immediate experience visitors in committing to further Hidden Valley Cabin experiences. Additionally, both immediate and previous guests reported that they would stay in similar accommodation styles in the future. Not surprisingly, perhaps, this figure was marginally higher than the percentages obtained in the data about returning directly to the Hidden Valley opera-tion since the visitors were scattered across Australia (and a few were from overseas). This spread of visitor origins emphasizes the value of asking about transferred loyalty in tourism studies since it is often impractical and expensive for visitors to return to the

same site (Pearce & Kang, 2009). The data represent an encouraging result for ecotourism operators seeking to present a low carbon footprint experience to visitors. Visitors may have to modify some of their holiday behaviour and expectations but at least for this successful Australian site they appear to do so while retaining an enthusiasm for further similar experiences.

CONCLUSION

This chapter reduces the complexity of visitor behaviour studies in ecotourism settings by focusing on people's overt or observable activities. Observing visitor behaviour is a feasible and useful research approach with a distinctive power and capacity for insights. It is of particular interest when the behaviours are holistic, naturalistic, socially or legally sensitive, and involve movement over time and space. In any of these circumstances recalling behaviour accurately is likely to be a problem. Nevertheless, this focus on overt behaviour still has its own intricate issues. It is challenging and often impossible to interpret visitors' intentions from their acts alone. The meaning that an observer can ascribe to a reported action may also be different to the interpretations given by those in the setting.

In this review the power of focusing on observable visitor behaviour is demonstrated in studies of how people view attractions and key interest sites. Visitor behaviour is found to exhibit key regularities in the way people move through spaces. Studies of the time visitors spend at sites can be illuminated by the value of recording attracting and holding power supplemented by attention to passing behaviour. It is argued that the development of the concept of slow tourism, an antidote to the speed of contemporary life, was congruent with the potential benefits visitors may obtain as they contemplate ecotourism settings. Two case studies, one at the natural ecotourism setting of Flinders Chase National Park, Kangaroo Island and one at Hidden Valley Cabins, offer specific accounts of the management of visitor behaviour. In the first case information provision through a visitor centre and on-site signage supplemented by improved infrastructure has produced positive results for the setting and visitor experience. In the Queensland case there appears to be a visitor response to sustainability practices that means their future behavioural choices will reinforce the ecotourism operators' vision of providing a carbon neutral experience. The studies at the two sites prompt reflection that the ways communities and businesses now manage these two sensitive sites mirror their overriding vision of the value of these ecotourism settings.

The research opportunities framed by the concepts expressed in this chapter offer some focused directions. It can be suggested that direct observational work may usefully complement the more standardized survey and questionnaire designs. The ability to observe visitors in ecotourism settings and collect systematic records of what they do, for how long they do it and with whom they enact their chosen behaviours may complement other information sources. While assessing intentionality is an issue, the validity of the observational work is a powerful reason for its use because the actual record of what visitors do can usefully be juxtaposed with what they say they do. Above all perhaps, the value of the concepts and approach to understanding visitor behaviour expressed in this

chapter might assist researchers to become keener and more incisive observers of what happens in ecotourism settings.

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