

Managing for visitor experiences in protected areas: promising opportunities and fundamental challenges

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Rapidly increasing international and domestic travel provides both opportunities and challenges for managers of the globe's over 100,000 protected areas. Tourism can be a force for conservation, but underlying a successful tourism strategy is the provision of opportunities for high quality visitor experiences. Providing these opportunities requires an understanding of how visitors construct experiences, provision of appropriate supporting facilities and management programmes, protection of key natural and cultural heritage values, co-operation with the private sector and key monitoring activities. There are several challenges as well, including linking setting attributes with experiences, understanding the interests of managers, visitors, tour operators and communities, and mapping and measuring what experiences visitors desire.

THE CONTINUING AND DRAMATIC INCREASE in both international and domestic travel poses significant opportunities for managers of the globe's over 100,000 protected areas. Many of these areas hold promise and opportunity for visitors to learn about, appreciate and enjoy the natural and cultural heritage preserved within them. Enjoyment of these areas, broadly conceived, serves as the underpinning for a growing nature- culture-based tourism industry. And with tourism providing the prospect for revenues for management of the area and economic development of adjacent communities, there is great interest among conservation organisations, communities and activists to take advantage of this interest.

But if protected areas are to be the foundation for a vibrant nature-based tourism industry, their managers are then confronted with the challenge of providing diverse, sustainable opportunities for high quality, rewarding visitor and recreation opportunities. Such opportunities simply do not happen. They are deliberately constructed with careful attention to the capabilities of the area, the heritage values protected within it, the conservation objectives established for it, the capacity of local business and communities to implement tourism and the expectations held by potential visitors. This challenge comes within the context of changing paradigms concerning the roles of public protected area agencies and private tour operators and firms.

Of particular significance is the growing use of private-public partnerships, arrangements between tour operators and guides and managers of publicly administered protected areas. In a world of growing competitiveness, and of increasing and diversifying demands and expectations for these areas, understanding the character of visitor experiences and thoughtful partnerships is as essential to good management as is understanding the biodiversity and biophysical processes occurring within the area. In this paper, I will review what it means to manage for visitor experiences, identify some relevant research and briefly examine several of the major challenges confronting protected area managers in this domain.

Some background in the science of visitor experience management

An experience may be defined in a number of different ways, but it appears most likely to be a social-psychological phenomenon, influenced by expectations visitors carry with them, the norms and values of their peers, and the attributes of the protected areas encountered during a visit. The experience is what visitors are seeking when choosing to visit a particular destination, be it swimming on a subtropical beach, an adventurous float down a tropical river, the personal

challenge of hiking in the arctic, or the emotions attached to viewing an historical monument. A focus on visitor experiences helps managers get beyond a superficial level emphasis on administering activities, such as camping, wildlife viewing, photography, hiking, walking, and so on.

The fundamental premise of contemporary visitor management is that quality experiences are best assured by providing a range or diversity of setting opportunities. A **setting** is the combination of attributes of a real place that gives it recreational value (Clark and Stankey 1979). Settings are comprised of three types of attributes: (1) biophysical, which is defined as the amount of change visible in the natural environment; (2) managerial, the presence and type of rules and regulations proscribing visitor behaviour, and the visibility or presence of management personnel, including enforcement, and (3) social, which includes the type, amount, frequency and location of encounters with other visitors. Type of access (highway, dirt track) is also sometimes used to describe the character of the setting. Finally, specific characteristics of setting, such as its natural or cultural heritage, provide the inherent value that attracts visitors.

An important contribution to the literature of recreation management is the idea that there are differing 'levels' of demand. The **recreation demand hierarchy** (Driver and Brown 1978) was developed to describe these levels and their linkages. Figure 1 shows this hierarchy. The demand hierarchy is so named because it states that demand occurs at four levels, based on the complexity, visibility and understandability of the specific level. At the top are demands for recreation activities – this is the *form* of recreation that we observe at various protected area settings, it is the behaviour that individuals practice and display, such as their participation in camping, wildlife viewing, swimming, rafting and so on. At the next level are demands for the recreation settings described above. Settings are the places where the top level demands occur, and an argument can be made that demands for activities are better stated as demands to participate in specific activities within a particular setting, such as backpacking in a remote, uncongested wilderness. Settings are the places that managers manage, where the biophysical impacts occur, and are comprised of the attributes sought by visitors.

Figure 1. The Recreation Demand Hierarchy (adapted from Driver and Brown 1978). Demands for recreation occur at four levels, the most visible and most superficial being demand for activities (such as camping, hiking) and the most difficult, and deepest, being demand for the benefits derived from participation (such as increased family cohesiveness).



At the third level, demands for recreation experiences are expressed. This means that people engage in certain recreation activities in particular settings in order to have satisfactory experiences. In essence, visitors select particular setting attributes, put them together in their head, and then construct an experience containing such dimensions as adventure, challenge, solitude, stress release, companionship, appreciating nature, freedom, spirituality and escape. In any given recreational engagement, perhaps only a few of these dimensions are sought or experienced. Different visitors in the same setting may be seeking very different experiential dimensions. For example, on a game-viewing drive in a southern Africa national park, some visitors may be seeking challenge, appreciating nature, and adventure, while others may be looking for escape, freedom, and appreciating nature. And different settings may provide opportunities for similar experiential dimensions.

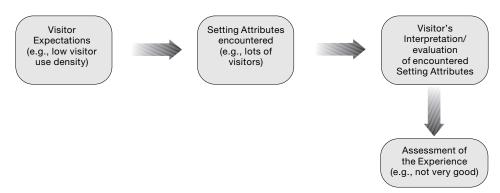
Helpful to understanding the notion of experience is the concept of **satisfaction**. Satisfaction may be defined in several ways, such as the realisation of expectations, the difference between a person's normative definitions of a preferred experience and what is realised or the attainment of that individual's defined quality experience. Thus, protected area managers often hold the goal of providing *satisfactory* visitor experiences. Unfortunately, measurement of satisfaction has been difficult and controversial in the recreation research literature and has raised a number of questions: What is appropriate to measure, satisfaction with the whole experience or satisfaction with individual setting attributes? How is satisfaction measured, on a single item scale, or more qualitatively? There is often a self-selection bias in studies of visitor satisfaction: visitors at a site select the site for its expected ability to provide certain experiences, and thus one would anticipate they would be satisfied.

At the fourth, and 'deepest' level of the demand hierarchy is the notion of **benefit**. Benefits are the 'improved' conditions experienced by individuals, small groups and society at large as a result of satisfactory recreational engagements. If individuals receive a satisfactory recreational experience, benefits will result. These benefits may involve reduced family divisiveness, greater worker productivity, increased personal incomes or reduced crime. Benefits from experiencing a high quality opportunity might also include additional support for a protected area, increased labour income in the local area or an accelerating interest in conservation.

In order to better understand how settings, visitors and experiences may interact, please refer to Figure 2. Visitors bring to a setting a set of expectations regarding the condition of the setting attributes. The figure illustrates the attribute of visitor use density. Thus, a visitor to a remote Namibian desert park may bring an expectation that few others will be encountered. Once at the site, the visitor may encounter more visitors than expected. Given the expectations developed prior to the visit, the visitor may then evaluate this condition as 'crowded', and if such expectations are a very important component of the overall experience, the visitor may come away from the visit unhappy and unsatisfied. This experience may lead to new expectations for a return visit, or may be communicated to others planning a similar visit. However, just because many people are present at a protected area does not mean that visitors will necessarily always feel the setting is crowded.

Naturally, the whole process is much more complex than this simple example: some people may have poorly formed expectations, or even no expectations. Once on the site, visitors may reform their expectations so the unanticipated conditions are not viewed so negatively (a process known as 'product shift'). Other visitors may find the conditions so unacceptable that they

Figure 2. Simplified Model of Visitor Experience Production Process. Experiences are constructed by visitors based on expectations, what they encounter on the site, how those attributes compare to their preferences and notions of acceptability. Such evaluations and assessments eventually feedback into construction of new expectations, and may influence other visitor expected experiences. The example provided is for a remote wilderness setting. In some settings, encountering lots of visitors may lead to a different evaluation and assessment.





A lone hiker in Canada's Auyuittuq National Park enjoys a visitor experience characterised by solitude, adventure, challenge and interacting with nature. Photo: Stephen McCool.

immediately go somewhere else (known as displacement). What is important, however, is that there are specific linkages among these different components. Managing for high quality visitor experiences must account for all elements, relationships and feedback loops in this process.

Finally, it is important to understand that the linkages between setting attributes and experiences are probabilistic not deterministic. All managers can do is create the opportunity for an experience: by careful, sensitive management of setting attributes, they can facilitate some experiential dimensions. For example, by providing interpretative displays and messages, managers facilitate a learning experience, but the presence of such programmes does not ensure that all visitors will learn. And, if managers are not careful, some attributes such as visitor use density, may hinder other experiential dimensions, such as solitude.

The above short tutorial suggests that protected area managers are confronted with a number of questions: What experiences do visitors seek? What setting attributes do visitors find acceptable and what is preferred? Which of these experiences is appropriate in a specific protected area? How do we manage protected areas to provide for these appropriate experiences? How do we decide on what is appropriate? Who gets to decide? What types of areas provide for what kinds of opportunities? How do we ensure that managing for experiences does not lead to unacceptable impacts on the area's natural and cultural heritage? How do we reconcile competing objectives and conflicting experiences? The challenge to sustain visitor experiences in protected areas encompasses these questions and many others.

A variety of research around the world has identified a number of dimensions of visitor experiences sought in a diversity of settings. For example, Kneeshaw and others (2003) identified several dimensions of experiences sought by visitors in Denali National Park in Alaska, including freedom from management restrictions, challenge of access, untrammelled wildlife, risk and uncertainty, and a "taste of the arctic". A similar study, reported by McCool and others (2007) of visitors to Canada's Auyuittuq National Park on Baffin Island found that visitors were seeking primarily freedom/serenity, challenge/adventure, naturalness, learning and appreciating nature, an arctic experience and spirituality. Driver and associates have also researched the dimensionality of expected experiences for thousands of visitors and recreationists in the US. Their research suggests that visitors seek a wide variety of experiences, including challenge/adventure, excitement, escape, stress release, solitude, family and friendship cohesiveness, freedom, learning about and appreciating nature and so on.

By using careful observation or sophisticated statistical analyses, managers can come to understand that their market can be segmented by how important various experiential dimensions

are to visitors. For example, one group of visitors to a site might expect high levels of solitude, opportunities for escape, and a high degree of naturalness, while another segment may expect, in the same protected area, family cohesiveness, viewing scenery, and challenge as the most significant dimensions of the experience, with the other dimensions of lower importance. As a result of this segmentation, managers can more appropriately design sites and programmes to facilitate experiences consistent with conservation objectives.

The results of this extensive research experience strongly indicate that: (1) experiences in protected areas are multi-dimensional; (2) setting attributes are often important in facilitating or hindering attainment of experiences, but this relationship is probabilistic rather than deterministic; (3) distinct trade-offs occur when making managerial choices between providing opportunities for experiences and protecting heritage values, although these trade-offs often may be unclear in the short run; (4) experiences are subjective and to some extent unpredictable, but may be identified and used in decision-making; and (5) monitoring of visitor experiences (in some way) is essential when cause-effect relationships (between setting attributes and experience dimensions) are unclear, but selecting necessary indicators for monitoring is essential to situation specific management.

Engaging challenges

The state-of-the-art in visitor experience management certainly needs improving; research would help managers understand what it is that visitors are seeking; management frameworks, such as the Recreation Opportunity Spectrum (Clark and Stankey 1979) or Tourism Opportunity Spectrum (Dawson 2001) or Limits of Acceptable Change (Stankey and others 1985; McCool 1994) help managers make decisions about what experience opportunities are appropriate where; the private sector, through guides and tour operators can facilitate visitors constructing these desired experiences; and implementation of monitoring protocols can help managers understand if their experience management goals are being achieved. Nevertheless, there are a number of challenges facing management of visitor experience opportunities in protected areas.

In this section, I review several of the significant challenges and emergent issues that confront the goal of managing for visitor experiences. Sustaining visitor experiences over the time scales necessary to build a business, to protect a park, to make available quality tourist opportunities or to assist a community requires vigorous engagement of business leaders, community activists, visitors and park managers. The ability to provide high quality opportunities over long time frames is fundamental to being competitive in the global arena that characterises 21st century tourism.

Mapping and measuring visitor experiences

At the heart of sustaining visitor experiences is a significant research task that involves understanding what outcomes tourists seek when visiting protected areas. In one sense, the technology for mapping and measuring visitor experiences is well advanced, but evolving, broadening the repertoire of methodologies available. In the US, a strong research tradition built upon the work of Driver, Brown, Knopf and associates (e.g., Driver, Tinsley and Manfredo 1991; Driver, Brown and Peterson 1991) has informed many a park and protected area manager of the setting attributes and experiences that tourists seek during a visit. This approach to identifying visitor experiences is based on the proposition that a satisfying experience is determined by the extent to which the actual outcomes sought compare to those experienced. This approach largely attempts to identify the specific experiential dimensions sought by visitors, thus being specific about what it is that visitors seek.

However, Borrie and Birzell (2001) discuss several approaches to identifying the experiences visitors seek when entering a protected area. These include meaning-based approaches (where

scientists attempt to understand the role of wilderness or other protected areas within the larger context of the visitor's life), experience-sampling methods (where researchers, through the use of an electronic beeper or other means, ask study respondents to describe moods and other feelings about the area at specific points in time) and importance-performance analysis (which calls upon visitors to rate the importance of certain setting attributes to their experience and how well those attributes functioned during their visit). Each of these approaches has certain advantages and has varying utility for how a specific mountain setting would be managed.

Linking site attributes to desired experiences

Mapping the experiential dimensions that visitors expect to attain from a recreational engagement is important, but understanding how to manage settings so that they may achieve these outcomes is critical to sensitive stewardship. In terms of visitor experiences, all managers can do is provide the *opportunity* for visitors to achieve the experiences they seek; visitors create experiences by interacting with the attributes or conditions they encounter at a recreation site. Recreation sites contain many attributes, biophysical, social and managerial, only some of which may be relevant to particular experiences, others may be salient to all experiences. When recreationists visit a site they essentially 'pick and choose' the salient attributes and from those construct a recreational experience. Understanding the linkages between site attributes and experiences is essential at a site and regional level.

Interests of managers, tour operators, visitors and communities

Managers, visitors, communities and business leaders have somewhat different interests in sustaining visitor experiences, and as a result these interests may at times collide, at others reinforce each other. The challenges and issues emerging from the intersections of these interests with protected area mandates are usually complex, frequently contentious, and filled with uncertainty. Within a social and political environment that is increasingly turbulent and volatile, sustaining visitor experiences has become, if nothing else, a messy job. What this means is that the planning and decision-processes concerning provision of high quality visitor experiences will require collaborative, iterative efforts of important stakeholders. It will require recognition



High-use densities, such as shown here in China's Mt. Lushan National Park, are not necessarily negative. Crowding is in the eye of the beholder and is influenced by the visitor's expectations. Photo: Stephen McCool.

of the various trade-offs needed. And, it will require recognition that many decisions involved in managing for visitor experiences will be value judgments.

Conclusions

Of course, tourism, like other economic development tools, is a two-edged sword – with the economic, learning and political benefits of tourism come potentially significant social and environmental costs, and these costs may be particularly deleterious in and near protected areas. With careful sensitive management attending to the notion of *sustainability*, these costs can be minimised. A major component of this effort must be consideration of the type and quality of visitor experiences to be offered. Research can provide the information about what visitors are seeking; managers determine what experience opportunities are appropriate; tour firms and operators help facilitate those experiences in many cases, and communities provide the broader destination and context in which those experiences occur. And, thus an integrated process will lead to higher quality experiences, resulting in greater visitor expenditures and more support for the protected areas that provide these opportunities.

Deciding what visitor experience opportunities to provide is fundamental to this process. Supporting facilities and public use management actions can then be designed to facilitate these opportunities as well as protect heritage values from unacceptable impacts. Developing indicators and a monitoring process is also essential to ensuring that desired experiences are being attained. While the science of identifying what visitors seek has strong conceptual foundations, the art of managing these opportunities is less well developed. One of the challenges for the future is for closer collaboration involving social scientists and protected are managers.

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