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Building and Sustaining Support for National Parks in the 21st Century: Why and How to Save the National Park Experience from Extinction

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RUNNING HEAD: Saving the National Park Experience

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Executive Summary

Understanding and enhancing societal support for national parks is critical for their survival globally, especially in the uncertain and rapidly changing economic and political environment of the twenty-first century. This paper argues that the continuing availability of a diversity of visitor experiences in national parks is essential for cultivating this support. Employing national park experiences as key tools for building and sustaining societal support, and the strategies for doing so, have received limited attention by scholars. This paper aims to conceptualize the benefits and threats to visitor experiences in national parks as a basis for cementing their protection and enhancement into visitor management practices. It does this by drawing on literature investigating the benefits of visiting parks as a theoretical and empirical foundation for identifying the range of visitor experiences that need to be saved from extinction. Principles for endangered species management, derived from conservation biology, are then used as a conceptual lens to examine the threats to these experiences. A values-based perspective suggests the need to both address threats to these experiences and foster the associated benefits to visitors and society. A suite of management strategies at the park/site level and systems level are suggested to reduce threats to the quality and diversity of visitor experiences as well as enhance the benefits of visiting national parks. These strategies can be engaged to complement rather than replace the current impact-focused approach to managing the visitor experience. Concluding recommendations for future research include: clarifying the threats to the visitor experience globally and the synergies between them, exploring the relationship between the management of settings in national parks and the accrual of benefits, and initiating and analyzing the efficacy of interventions designed to maintain and enhance the benefits of visiting national parks. Such initiatives are central to both saving the visitor experience from extinction and for building and sustaining support for national parks in the twenty-first century.

Introduction

Since the United States' initiation and popularization of the concept of a national park with the establishment of Yellowstone National Park in 1872, more than 4.4 million square kilometers of the earth's surface have been set aside as national parks (Hall & Frost, 2009). Based on the International Union for Conservation of Nature's (IUCN) definition of a national park, there were 3,881 national parks globally at the turn of the century (Chape, Blythe, Fish, Fox & Spalding, 2003). Of course, both the criteria for and the practice of establishing national parks have been adapted to suit different political, social and environmental contexts and have evolved over time (Hall & Frost, 2009). Nonetheless, national parks are generally understood to be places offering people the opportunity to experience and enjoy the natural environment, while protecting the planet's biodiversity, hence fulfilling a dual mandate in today's society (Crompton, 2008; Newsome, Moore & Dowling, 2013).

Societal support for national parks has always been critical for their survival, but is particularly so in times of uncertainty and rapid change, both of which are fundamental features of this century (Rosenburger, Bergerson & Kline, 2009). Nash (1967) acknowledged the actions taken by individuals, conservation bodies and governments in securing "the whole-hearted interest" (Nash, 1967, p. 77) and support of society generally for national parks. More recently, societal support for national parks has been argued on the grounds of their contributions to regional development, and environmental, economic and social sustainability more generally (Hall & Frost, 2009; Mose, 2007). Despite this, McNeely (1994) suggested some 20 years ago and Eagles (2013) reiterated nearly two decades later that support for national parks has received too little direct attention from both researchers and managers. As a result, there continues to be a very low level of understanding of the extent to which global societies value and support the existence of national parks, and the reasons or antecedents for societal support.

A premise of this paper is that one important avenue for cultivating support is ensuring that a diversity of visitor experiences continues to be available in national parks. Eagles and McCool (2002) directly linked visitor numbers with societal support. The fact that experiences in national parks face a number of threats and in some cases may be in danger of extinction (Miller, 2005) is thus of some concern. This paper argues for sustaining and enhancing the visitor experience in national parks as a key strategy for engendering public support and thus survival.

The aim of this paper therefore is to examine the benefits of and threats to visitor experiences in national parks and the implications of these for visitor management. As such, the paper seeks to:

- Illustrate why there is a need for the revival, protection and enhancement of national park experiences and the demand for these experiences;

- Identify and describe the threats to the quality and diversity of visitor experiences in national parks;
- Present management strategies to address threats to visitor experiences and protect the values inherent in the visitor experience, in particular maximizing the benefits to visitors and society more broadly; and
- Provide research recommendations to enhance knowledge of visitor experiences and develop and test mechanisms for protecting and enhancing their future in national parks.

To understand why national park experiences need protection, the paper first examines the benefits of, and conversely the costs of not, visiting national parks from both visitor and societal perspectives. Benefits derived from visiting parks represent core values for many national park agencies and, as such, planning and management must protect both the benefits and the associated values of the visitor experience. The paper then turns to conservation biology to provide a lens for better understanding the threats to the demand for, and the quality and diversity of, visitor experiences in national parks and why a response to these threats is required. After presenting the current context for visitor management in national parks, a matrix of management strategies is presented in response to the threats to the visitor experience. These strategies complement rather than replace current management approaches and, by addressing the threats, can contribute to protecting and enhancing the benefits and values inherent in the visitor experience.

Experiences in National Parks: Current Status, Issues and Benefits

Nearly 30 years ago E O Wilson (1984), in his watershed book *Biophilia*, argued that humans have a desire and a need to affiliate or connect with nature. Since then, and indeed well before Wilson's book, environmental psychologists, leisure scientists and others have been investigating and documenting both the desire for and the benefits of spending time in nature. As a result, there is much anecdotal evidence and some rigorous empirical research to support the assertion that being outdoors and in nature, including visiting national parks, is good for people (Maller, Townsend, Pryor, Brown & St Leger, 2006). Yet today, nearly half of the world's population lives in urban areas, making it difficult for many to access nature-based experiences (Miller, 2005). In the late 1970s, ecologist and author Robert Pyle first expressed the concern that experiences in nature were in danger of extinction (Pyle, 1978).

A study by Balmford et al. (2009) of protected areas in 20 countries and the associated visit rates found that although visitor numbers are generally increasing in most countries, they are declining in the United States and Japan. Similarly, based on a trend analysis of visitation to national parks in the United States, Japan and Spain and various types of public lands in the United States, Pergams and Zaradic (2008) provide compelling evidence of a downward trend.

There is also speculation that new generations are both ignorant about and simply not interested in nature-based experiences (Kareiva, 2008). Popular science writers such as Louv (2005) and others have assembled thousands of examples of the decline in both the demand for experiences in nature and the consequences, including what Louv calls “nature deficit disorder”, a term he invented to describe children with brains and bodies no longer equipped for experiences in nature. The term “environmental generational amnesia” has been used to describe the consequences that might result if whole generations were to grow up with no memory of experiences in nature and no capacity to experience and enjoy natural environments (Kahn, 2002). Together with other studies reporting a widespread decline in nature-based recreation (Cordell, Betz & Green, 2008; Kareiva, 2008), Pergams and Zaradic (2008, p. 2295) suggest that this disengagement from experiences in nature will “greatly reduce the value people place on biodiversity conservation”.

The first section of this paper seeks to provide a scholarly backdrop to these relationships, drawing on the leisure, outdoor recreation and tourism literatures regarding the phenomenon of experience and the importance and benefits of experiences in nature, and in national parks in particular. Experience has been described as a multi-faceted phenomenon (Freidmund & Cole, 2001) and a psychological outcome and as such has proved challenging to conceptualize and measure (Manning, 2011). Many scholars define experience in subjective terms, as a phenomenon that is intangible, continuous, personal and unique to the individual (Pine & Gilmore, 1999; O’Dell, 2007). Extraordinary experiences in national parks have been defined as highly memorable, special and emotionally charged (Jefferies & Lepp, 2012).

A national park experience can be entirely passive, very active, or something in-between, and can of course be a combination of these if it lasts for many days (Clark & Stankey, 1979; Manning, 2011). It might be site-specific, or involve movement across one or more national parks by motorized vehicle, on a bicycle or skis, in some sort of watercraft, or on foot. The visitor experience can be self-directed, partially mediated by an interpretation/visitor center and/or signage, or entirely orchestrated by a tour operator or staff. It may or may not involve an overnight stay within the national park, ranging from backcountry camping in a tent or hut, to caravan and mobile home camping to hostels, cabins and even relatively luxury resort-style accommodation. In fact, a key element of experiences in national parks is their diversity.

The experiential benefits of visiting parks, such as the opportunity to challenge oneself or to learn something new, that emerge from the activities, settings and experiences provided have been extensively researched (Cole & Hall, 2009; Martin, Marsolais & Rolloff, 2009). However, a series of higher-order personal benefits, such as mental and physical health outcomes, also emerge from satisfying experiences achieved through visiting national parks (Crilley et al., 2012, Manning, 2011) but have proven more difficult to measure and link with participation (Tomas, Crompton & Scott, 2003).

Benefits-based management (BBM), discussed later in this paper, seeks to tap into these links, acknowledging that if visitors participate in particular activities in appropriate settings they

will not only achieve their desired recreation experience, they will also accrue a series of benefits – on-site and off-site as well as short-term and long-term (Driver, 2008; McCool, Clark, & Stankey, 2007; Weber & Anderson, 2010). Drawing on previous literature to capture the full range of benefits that accrue from recreational experiences (including experiences in national parks), Driver (2008) identified a total of 141 personal, social, economic and environmental benefits.

Acknowledging limitations of scope (most of the research on the benefits of visiting parks has been undertaken in urban parks) (Baur & Tynon, 2010) and methods (lack of causal research) (McCool et al., 2007), several studies are worth mentioning here in that they specifically addressed the benefits of visiting national parks. Pierskalla, Lee, Stein, Anderson and Nickerson (2004) conducted a meta-analysis of nine benefit-based studies in Minnesota, Arizona and Colorado in the United States, finding that some of the benefits of park-based experiences require activities and settings provided in national parks. In Crilley, Weber and Taplin's (2012) study of visitors to the iconic Kakadu National Park in northern Australia, two types of benefits, relaxation and nature, were found to depend on the biophysical, social and managerial setting that Kakadu provided and the activities in which visitors participated. Informed by this literature, Table 1 provides a useful summary of the suite of benefits visitors may seek or obtain from experiences in national parks, as a platform for considering the range of national park experiences and benefits that are potentially under threat, and thus why support of national parks may in turn be under threat.

Table 1. Experiential and Higher-order Benefits of Visiting National Parks

Experiential benefits of visiting national parks:	**Higher-order personal benefits of visiting national parks:**
Accessing natural experiences	Appreciate biodiversity
Escaping urban environments	Appreciate scenic beauty
Being in a comfortable and safe place	Connect with heritage
Relaxing and unwinding	Connect with culture
Finding peace and solitude	Connect with nature
Participating in outdoor recreation activities	Connect with spiritual side
Socializing with friends and family	Strengthen social networks
Experiencing something new and different	Strengthen family ties
Having fun	Achieve mental health benefits
Challenging oneself	Achieve physical health benefits
Learning about nature, culture and heritage	Increase self-confidence
Reflecting on personal values	Improve quality of life

SOURCES: Based on interviews with senior managers of three national park management agencies, with analysis informed by benefits research spanning 20 years including McCool & Reilly (1993), Stein & Lee (1995), Driver (2008), Weber & Anderson (2010), Manning (2011), and Godbey & Mowen (2011).

So far this paper has focused on defining and detailing the diversity and richness of the visitor experience and associated benefits as a basis for understanding why the protection of

experiences in national parks is important. It is equally important to consider what, if anything, is threatening the demand and opportunity for and benefits derived from such experiences. The next section of the paper uses what is known about the threats to endangered species, as articulated in the conservation biology literature, as a lens to facilitate understanding of the myriad of threats potentially facing visitor experiences in national parks.

Threats to the Demand for and Quality and Diversity of Visitor Experiences in National Parks

While there is a growing body of evidence that the extinction of experiences in nature may have harmful consequences to individuals and society, the source and nature of threats to experiences in national parks have received less scholarly attention, with some notable exceptions. Crowding has long been touted as pivotal to experience, although recent research suggests that congestion does not necessarily cause deterioration in the visitor experience or reduction of benefits, even in wilderness settings (Cole & Hall, 2010). Other threats to maintaining and enriching visitor experiences have been researched, particularly in the United States, but not systematically analyzed and prioritized in the same way that global threats to the environment have been investigated.

In the absence of a coherent body of research documenting the threats to national park experiences, this paper turns to conservation biology for instruction on what threatens animal and plant species with extinction. Recovery planning, where there is an emphasis on identifying and managing threats (Clark, Hoekstra, Boersma & Kareiva, 2002; Hayward, 2009; Hoekstra, Clark, Fagan & Boersma, 2002; Lawler et al., 2002), especially informed this analysis. This approach, derived from the natural sciences, makes it possible to determine what might be threatening the demand for and the opportunity to engage in national park experiences (see column 1 of Table 2), plus potential strategies for responding to these threats. These responses are then used in the final section of this paper and in Table 2 as the building blocks to present a matrix of strategies for managing national parks in ways that protect and enhance the visitor experience.

Table 2. Matrix of Management Strategies for Addressing Threats and Enhancing Demand and Opportunities for Visitor Experiences in National Parks

Endangered species threat: ***Visitor experiences under threat***	**Strategies for addressing threats to visitor experiences and enhancing experiences**	**Examples of management strategies at the park level**	**Examples of management strategies at the system level**
1. Lack of appreciation of importance of endangered species: *Lack of appreciation of experiences provided by national parks*	Communicating that national park experiences are something worth saving	Undertaking and communicating the benefits and values of national park experiences Selection and promotion of iconic experiences Philanthropy and corporate sponsorship of specific park settings, activities or experiences	Communicating and educating society about the values and benefits of visiting parks Use of iconic park experiences as ambassadors for park systems Partnerships and endorsements that foster appreciation of park experiences New forms of governance
2. Loss of habitat/ loss of species diversity: *Loss of places and spaces for diverse visitor experiences*	Protecting diversity in national park settings, activities and experiences	Recreation opportunity spectrum Zoning, site design and management to expand opportunities Co-creation of new experiences	Recreation opportunity spectrum Co-creation of new experiences
3. Increased competition for food and resources: *Increased competition for park resources and visitor experiences*	Strategic (re)positioning of national park experiences	Developing new opportunities for current non-visitors Cooperation with competitors, especially aligning with education, health and justice Embracing technology	Real and associative repositioning of national parks in society Building an economic case to support visitor experiences Exploring and expanding commercial opportunities in and near national parks
4. Lack of science to save species: *Lack of research to inform how to manage and enhance the visitor experience*	Disseminating and using visitor research on benefits and values	Measuring and demonstrating benefits Management based on benefits/value	Integrating social science into management through adaptive management

Threat 1. *Lack of Appreciation of the Importance of a Species: Lack of Appreciation of Experiences Provided by National Parks*

Threats to biodiversity through the extinction of species is widely acknowledged as a pressing twentieth and twenty-first century environmental issue, both in the academic literature on conservation biology (Heller & Zavaleta, 2009; Wilcove, Rothstein, Dubow, Phillips, & Losos, 1998) and in the broader environmental field (MEA, 2005). Stopping or slowing extinction, while at the same time providing conditions conducive to the continuing evolution of species, is considered fundamental to the health of the planet.

A first response to a threat of extinction by scientists and conservation organisations is often to put an endangered species on a statutory list where its protection is mandated in law. In the United States, under the *Endangered Species Act of 1973*, once a species is listed, protected habitat is designated and a recovery plan must be prepared (CBD, 2012a). Listing helps to publicize and promote the value of, and threats to, the species and to attract resources for its protection. A second key strategy of conservationists and scientists alike is to prepare a recovery plan (Hoekstra et al., 2002) and a third is to utilize partnerships to present a stronger case to harness a wider range of resources and to reach a wider range of audiences (Boyd & Svejcar, 2009). A fourth strategy is to engage endangered charismatic species, such as the giant panda, the Sumatran tiger or the white rhino, as ambassador species to further the cause of the environment more generally. This is seen as a way of averting the extinction of other relatively unknown and unexciting plant and animal species that are important in the broader biodiversity context. For example, a global strategy of the World Wide Fund for Nature (WWF) is to focus on flagship species that have iconic status to raise awareness and stimulate action and funding for broader conservation efforts (WWF Global, 2012). Just as a species under increased pressure for survival can become extinct if there is insufficient knowledge about or valuing of it, national park experiences may be moving towards extinction simply because of a lack of realization that they are under threat and worth saving. Do national park management agencies, government departments and society generally understand the importance of visitor experiences in national parks and the benefits they provide? Does the taxpaying public appreciate the benefits of spending time in national parks? Are the economic costs and benefits of providing (and withdrawing) a full range of experiences in national parks understood and communicated to stakeholders, potential partners and donors? We do not know the answers to these questions. As a result, in times of economic uncertainty and ensuing funding cuts, national park management agencies run the risk of continuing to lose resources for protecting and enhancing quality visitor experiences to competing government departments and fiscal priorities (Buckley, 2009; Eagles, 2013).

***Threat 2**. Loss of Habitat/Loss of Species Diversity: Loss of Places and Spaces for Diversity of Visitor Experiences*

Despite attempts to reduce biodiversity loss, the extinction of species is likely to continue (Roman, Ehrlich, Pringle & Avise, 2009). Changes in biodiversity due to human activities have been greater in the last 50 years than in any time in human history (MEA, 2005). A pivotal mechanism used by society to protect biodiversity is reservation of lands and waters as protected areas. This is based on the rationale that in-situ conservation is far more effective and cost-efficient than seeking to preserve species off-site in zoos, aquaria and botanic gardens.

Reservation of both terrestrial and marine habitats is directed towards diversity. The current Convention on Biological Diversity Aichi targets (set at Nagoya, Japan, in 2010) commit to reservation of 17% of the world's terrestrial biomes and 10% of its marine biomes by 2020 (CBD, 2012b). Almost half the world's biomes, however, remain under-represented, based on the IUCN's previous target of 10% of all ecosystems (Jenkins & Joppa, 2009). Temperate grasslands, savannahs and shrublands are the least well represented, with less than 4% in protected areas. Also short of the 10% target are tropical and sub-tropical dry broadleaf and coniferous forests, boreal forests, deserts and Mediterranean ecosystems (Jenkins & Joppa, 2009).

Similarly, national park experiences can be threatened by a lack of diversity in places and spaces to allow visitors to experience the full range of benefits (see Table 1). For example, are there enough places where people, no matter where they live, can have a real sense of biodiversity and other natural and heritage values protected by national park management agencies? Are there adequate opportunities where visitors can connect with nature, culture and heritage? Can visitors, regardless of their economic means, state of health and fitness, and educational and cultural backgrounds, experience the full range of benefits discussed earlier in this paper and presented in Table 1?

***Threat 3.** Increased Competition for Resources and Food: Increased Competition for Park Resources and Visitor Experiences*

Vulnerable species are often threatened with extinction due to "competition" with humans and other species for habitat and other resources (Lawler et al., 2002). A fundamental pillar of conservation biology and the associated conservation of vulnerable species is identifying threats and then undertaking management efforts to abate them (Clark et al., 2002; Hoekstra et al., 2002). Key threats include land clearing, competition for resources (e.g., by grazers such as goats and rabbits), predation by introduced carnivores (e.g., foxes, cats, rats), invasion and habitat dominance by pest plants, loss of biodiversity and ecological integrity through invasion of alien animals (e.g., feral pigs, camels), unsuitable fire regimes, habitat fragmentation, climate change, overharvesting, and the catching of sea turtles, bird and other marine non-target species through fishing (Brook, Sohdi & Bradshaw, 2008; Hoekstra et al., 2002; Lawler et al., 2002).

Threats do not act in isolation; they have synergistic feedbacks (Brooke et al., 2008). Habitat loss and fragmentation exacerbate other effects. Climate change similarly has effects on other threats, for example changing fire frequency and intensity. The emergence of new species and an array of other possible threats make prioritization of their management essential (Wilcove et al., 1998). However, an inconsistent approach to and lack of documentation of threats makes priority setting between threats and ultimately species difficult if not impossible (Hayward, 2009).

Like vulnerable species, some types of experiences in national parks are under threat due to competition from a number of sources including overseas travel, videophilia (Pergam & Zaradic, 2008), and other forms of recreation including alternative opportunities to interact with nature such as wildlife parks and zoos (Taplin, 2012). Are competing experiences offered by high-tech, high-speed and highly sophisticated competitors such as theme parks, commercial tourism operations and tourism destinations with exotic cultures threatening the survival of national park experiences? And are national park-based experiences being replaced with much more accessible recreational options such as home-based entertainment systems and the pub/club scene? To what extent are new forms of leisure introducing or exacerbating threats to both demand for and access to national park experiences? While other activities can offer benefits such as fun, relaxation and socialization, are they falling short of delivering benefits such as the appreciation of scenic beauty and biodiversity, a chance to connect with heritage, nature, culture and one's spiritual side, and an opportunity to find peace and solitude? There may also be disadvantaged or vulnerable sectors of the population whose opportunities to experience and benefit from nature are particularly compromised by competition for their time and money.

Threat 4. *Lack of Science to Save Species: Lack of Research to Inform How to Manage and Enhance the Visitor Experience*

Science has helped save some plant and animal species but has failed to save others, with inadequate governance and leadership, a lack of institutional accountability and slow decision-making together resulting in interventions coming too late or not at all (Martin et al., 2012). Although generalities regarding extinction of species are known, a better understanding of the current context and interaction among threatening processes is required. Also of importance is knowing the population size, as small populations are more likely to go extinct through chance events (Brook et al., 2008). All of these require science and associated monitoring efforts (Lawler et al., 2002).

As identified by Lawler et al. (2002) and Ortega-Arguets, Baxter and Hockings (2011), gaps in ecological information are a major issue for endangered species' recovery plans. These authors noted the following science-based issues: poor biological/ecological knowledge for most endangered species, lack of basic information on threats, poor data sets on historical and current

population trends, lack of official monitoring for all listed endangered species, and lack of complementary evidence of recovery.

Over the last two decades science has been used in a novel way to research and explain the importance not only of endangered species but also of biodiversity more generally. The central role of biodiversity in ecosystem functioning and ecosystem services has been actively researched and espoused, with a large body of research relying on experiments and mathematical theory (Cardinale et al., 2012). Collectively, this science supports the contribution of biodiversity to the stability of ecosystem functioning over time and the direct influence (or strong correlations with) certain ecosystem provisioning (e.g., increased crop yields) and regulating services (e.g., greater resistance to plant pathogens).

Similarly, park systems may be on a path to losing at least some types of visitor experiences because of a lack of research that demonstrates the benefits and value of national park experiences. Much of the research to date is anecdotal or, at best, indicative rather than truly demonstrating cause-and-effect relationships between individual or cumulative park experiences and benefits to individuals and society more broadly. There is virtually no research that demonstrates the costs of experience extinction, neither at a site level nor across an entire park system.

Management Strategies for Addressing Threats to Visitor Experiences and Enhancing Experiences

Before using the conservation biology analogy and the derived threats to the national park experience to identify management strategies for mitigating threats and enhancing experiential opportunities, a brief background on current visitor management strategies is provided for context. Visitor management for many national parks is driven by the dual imperatives of protecting the natural environment and providing satisfying experiences for visitors. A strong emphasis on protecting nature has led to a visitor management focus of reducing the threats to the natural environment caused by visitors and to some extent reducing threats to the experience, with much less focus on enhancing the benefits and values of the visitor experience. Threat-based management responses have been diverse, including site design and management, education and interpretation, and regulation of visitor numbers and behavior (Newsome et al., 2013).

A number of management frameworks to inform such responses emerged beginning in the 1980s. Carrying Capacity, Limits of Acceptable Change (LAC) and the Visitor Impact Management (VIM) frameworks all explicitly focused on threats to the resource base (e.g., vegetation, soils, water) and to some extent the experiences of visitors (Manning, 2011; McArthur, 2000; Newsome et al., 2013), but have proven to be of limited value as tools for enhancing the experience of visitors. A stronger visitor experience focus is evident in the Recreation Opportunity Spectrum's (ROS) use of supply and demand to provide for a range of

opportunities and associated experiences through managing the physical, social and managerial characteristics of a site. One or more of these characteristics can be manipulated to provide a chosen recreation opportunity (and associated experiences) (McCool et al., 2007; Newsome et al., 2013).

Although most visitor planning frameworks begin with objectives that might incorporate the visitor experience, they largely have an impact rather than a benefit or value focus. These impacts are examined through indicators. While indicators can potentially measure benefits as in the Tourism Optimization Management Model (TOMM), generally the focus has been on impacts (Newsome et al., 2013). Unfortunately, with the exception of a handful of individual parks, the lack of adequate planning resources and post-implementation monitoring has impeded the successful application of virtually all of these frameworks (Newsome et al., 2013).

Benefits-based management (BBM), a relatively recent approach to visitor planning and management, was developed to shift the focus of decision-making from activities to desired outcomes. It is less a planning framework and more a way of thinking about visitor use, experience and opportunities (McCool et al., 2007). BBM fosters opportunities not only for desired recreation experiences but also higher-order personal and societal benefits (Stein & Lee, 1995; Weber & Anderson, 2010). The objective of BBM is to allow managers to facilitate the benefits associated with experiences by identifying and defining explicit target benefits (outcomes) and then measuring the extent to which they are achieved for the individual or for society (Manning, 2011; Moyle, Weiler & Moore, 2012).

Good national park management is best achieved with attention to both mitigating threats and facilitating opportunities to achieve benefits. McCool et al. (2007), in their comprehensive review of planning frameworks, note that explicit objectives are essential for good planning and management. Such objectives can include threats and values. Leverington, Costa, Pavese, Lisle and Hockings (2010), in their global review of protected area management, highlight the centrality of identifying values and directing management towards their achievement. A values-based approach centers on what is important, provides a holistic view, and is adaptive – all critical elements for successful park planning and management.

The following principles and associated management strategies are provided within the so-called modern paradigm for parks and protected areas (Phillips, 2003). This paradigm includes a broader set of objectives beyond conservation, an openness to governance via partnerships and involvement of local people, adaptive management styles, parks as systems and networks rather than as islands, and parks as community assets. This is not to discount the expertise of park staff, rather, such areas are best managed collectively and adaptively by many partners, with multiple sources of funding (beyond a single government source), as part of the broader landscape and as part of national, regional and international systems, recognizing and using multiple forms of knowledge (Phillips, 2003).

Aligning with this paradigm, visitor management strategies that protect and enhance the visitor experience at both the park and system level are needed (Table 2). Just as threats to endangered species are now clearly addressed as a landscape-level issue (Jewell, 2000), a system- rather than site-based approach is most likely to succeed. Similarly, an adaptive approach to management and an inclusive style of governance with respect to managing the visitor experience is more likely to succeed than the more traditional, centralized, top-down approach characteristic of the pre-1970s. Finally, management strategies aimed at promoting, protecting and enhancing the visitor experience need to be designed to sit alongside and complement visitor impact management strategies. The following sections provide examples of strategies that could be better used to promote, protect and enhance the visitor experience. Each strategy is paired with and addresses a fundamental threat to the park experience (as summarized in Table 2).

Strategy 1. *Communicating that National Park Experiences are Something Worth Saving*

Fundamental to a strategic approach to promote, protect and enhance national park experiences is the need for management agencies to dramatically improve their communication of the value and benefits of visiting parks, with attention to both the value of an individual national park and of the park system as a whole. Following the approach of conservation biologists, national park managers may need to consider high-profile strategies for highlighting visitor experiences and experiential settings that are endangered, communicating their value and articulating strategies for their protection. The value and higher-order benefits of spending time in national parks may need to be more explicit in management agency publicity and marketing activities – their corporate documents, website, school education activities, and so on. Showcasing iconic parks and national park experiences via documentaries, media releases, travel agency “familiarization” tours, celebrities and other marketing and public relations strategies can enable these iconic places and experiences to serve as “ambassadors” for the broader range of visitor experiences in national parks.

Iconic parks may also lend themselves to corporate sponsorship and philanthropy. Such sponsorship can be part of wider efforts by national park management agencies to engage strategic partners to help create and communicate the value and benefits of national park experiences. Funding bodies, non-government organisations, environmental and recreational groups, and corporations with environmental interests (e.g., mining companies) may lend support to the protection and enhancement of experiences. National park managers may need to consider corporate sponsorship and the endorsement of high profile individuals to promote the benefits of visitor experiences generally. It may be possible to harness individual philanthropists, sponsors or friends-of-the-parks groups to convey threats to, and the value of, specific national parks or park experiences (e.g., outdoor adventure) and build support. Research partners that can provide evidence of the beneficial outcomes of park experiences can assist at a systems-wide, park and specific activity level.

New forms of governance could parallel these other relationship-building efforts. Many national parks have historically been managed and funded solely by government (Eagles, 2009); however, this arrangement is changing, with commercial and community interests becoming involved. Graham, Amos and Plumptre (2003) proposed four models for protected areas of relevance to national parks: government management (the "traditional" approach), multi-stakeholder management, private management, and community management. Multi-stakeholder management in particular seems to offer opportunities to more widely understand and communicate the benefits of and threats to national park experiences.

Strategy 2. *Protecting Diversity in National Park Settings, Activities and Experiences*

Given the heterogeneity of national park visitors and of experiences sought (Manning, 2011; Newsome et al., 2013; Wagar, 1964), a diversity of settings seems essential. At both an individual park and systems level, the application of management approaches such as ROS enables explicit provision of diversity, from primitive through to highly developed (Clark & Stankey, 1979; McCool et al., 2007; Newsome et al., 2013). Managing settings has been clearly linked to the ability to provide a range of benefits (Pierskalla et al., 2004).

At an individual park level, zoning and site management strategies such as site hardening, infrastructure development (e.g., restrooms, visitor centers), group size and length of stay limits, seasonal restrictions and pricing are currently used to minimize visitor impacts (Newsome et al., 2013) but can equally be used to open up and enhance experiences. Importantly, they can contribute to providing a range of experiences, from top-end value-added experiences such as air-based sightseeing (e.g., helicopter rides over scenic features) through to back-country activities with no associated facilities or services.

In considering the diversity of offerings, park managers may need to think like conservation biologists and ensure that national parks provide habitats for the continuing evolution of experiences (i.e., places for new experiences). Park managers may need to adapt and customize their experiential offerings to accommodate the interests of new cultural groups who may be intimidated or alienated by nature and open space, and new generations who may be accustomed to living in virtual worlds if they are to gain and maintain support. The co-creation of experiences (Gentile, Spiller & Noci, 2007) by park managers and visitors, in contrast to managers simply scanning the horizon for the latest trends in products and services, offers a means for creating new experiences in national parks. Consistent with a values-led approach, the co-creation of experiences is based on shared values where the visitor is emotionally involved and actively engaged in staging their own experience (Binkhorst & Dekker, 2009; Prahalad & Ramaswamy, 2004). The building blocks for such an approach include dialogue, access and transparency, leading to highly personalized, customized experiences with relevance, meaning and benefits to the visitor.

Strategy 3. *Strategic (Re)Positioning of National Park Experiences*

The need to understand and work with a market "position" is not part of the lexicon of most park managers. Positioning refers to the place that national park management agencies occupy in the minds of elected officials and the general public, relative to their perception of other services that are competing for public tax dollars (Crompton, 2000). For park managers, positioning is the process of establishing and maintaining a distinctive, valued place in the minds of the general public and elected officials for national park-based experiences relative to other services, with "repositioning" being a deliberate set of actions designed to change an agency's perceived position. Without attention to positioning (and potentially the need to reposition), national park management agencies may be increasingly less successful in competing with other experience providers such as wildlife and theme parks and with other demands for public funding, such as education, health and justice.

Two repositioning strategies seem particularly useful for national park managers: real and associative repositioning (Crompton, 2009). Real repositioning involves the development of new experiences or the restructure of existing experiences to enhance potential benefits for both current and new visitors. Agency partnering with commercial interests may be one way to deliver these changes. Associative repositioning involves aligning with successful and credible experience providers such as nearby parks and commercial operators to create complementary products and share marketing opportunities. It can also include closer alignment with education, justice and health to provide benefits to those served by these sectors such as learning, economic/social/employment benefits, and mental and physical health and well-being.

At a systems level, it is important that agencies build a case based on visitor numbers and the benefits and value of national park experiences in order to compete with other public sector agencies for funding. Having economic data on the income generated by visitors to national parks is essential information for senior managers and, once multiplied by the number of visitors, can be used to project total income from visitors for the whole park system. These data are then highly valuable in making the case to governments for funding (Crompton, 2009; Eagles, 2013). More sophisticated economic models can also project the associated income for the regional communities in which national parks are embedded.

In terms of competition from the commercial sector, national park managers may need to embrace technology, including social media, in order to retain and extend their market share. They may find this easier by working with rather than against competitors with respect to national parks as providers of experiences, including how park experiences are priced, promoted and delivered.

Strategy 4. *Disseminating and Using Visitor Research on Benefits and Values*

Visitor research on benefits and values and the threats to these is critical. Such social research has strong parallels in the management of endangered species where research is still needed on species' responses to threats and the interactions and relationships among extinction drivers (Brook et al., 2008; Lawler et al., 2002).

In addition to conducting and supporting research that studies, monitors and documents the benefits and threats to visitor experiences, national park managers need to be more proactive in integrating the findings into management strategies aimed at sustaining and enhancing the national park experience. A shortcoming in benefits research that still needs addressing is in understanding the "recreation production function"; that is, being able to measure site attributes and establish linkages with higher-order benefits (McCool et al., 2007).

Integrating social science (and science more generally) into management remains an ongoing challenge. Unrealistic expectations that science will provide the truth within time frames that suit the immediacy of managers' needs have impeded it being valued and included in environmental policy and management (Pouyat, 1999). Park management is no exception. Adaptive management, which regards management as continual learning and sees no arbitrary separation of science and management (McLain & Lee, 1996) suggests a way forward. Just as Martin et al. (2012) warned that fast action is required to prevent the extinction of endangered species, the link to benefits in the national parks context needs to be proactively pursued as part of experimental management, rather than waiting until the visitor experience is under threat of extinction.

In summary, park visitor management strategies need to be engaged to address the threats to experience. However, saving experiences is like saving a species: it is not enough for the species just to survive – it needs to thrive and even evolve to be more resilient and able to withstand future threats. In other words, removal of the threats to experiences is necessary but not sufficient to ensure the survival of national park experiences. It is equally important to use management strategies, as illustrated in the foregoing discussion and in Table 2, to protect and add value to national park experiences to ensure they benefit visitors and society.

Conclusion

Providing experiences that deliver benefits to visitors and society is a critical function of national parks. This paper has drawn on and developed parallels between species extinction and extinction of the national park experience. The need for urgent action that has been emphasized regarding endangered species (Martin et al., 2012) must be similarly applied to visitor experiences in parks as the global population becomes more and more urbanized and physically and psychologically remote from natural areas. As Kareiva (2008, p. 2757) warns, the decline in demand and availability of nature experiences including those in national parks "may be far more

foreboding for the environment than even declining tropical forest cover or increasing greenhouse gas emissions".

The implications of the extinction of the visitor experience should not be under-estimated and cannot be left to chance. It is potentially damaging not only to visitors, but also to the future of national parks. Like any species in danger of extinction, its loss has synergistic consequences for other species and for the health of the planet generally. Park managers need to proactively protect and enhance opportunities for all sectors of society to access experiences in natural areas and to enjoy the benefits that such experiences offer.

Providing hope for a protected planet is the theme of the 2014 World Parks Congress. Communicating to visitors and broader society about why parks matter and why visitor experiences in national parks are something worth saving, together with managing to protect and enhance visitor experiences that in turn protect the experiential and higher-order benefits of national parks, offers hope. A priority outcome for the Congress is influencing and enabling solutions. The preceding section and the following recommendations for future research seek to do just that.

Most important in terms of future research is further clarifying the threats identified above, especially unwanted synergies (Brook et al., 2008) that lead to loss of experiential and higher-order benefits. This includes researching the extent to which any of the different benefits reported in the literature decline or disappear when there is a loss in the diversity of experiences available in national parks. It also includes developing a set of criteria that could be applied to a park or park system to identify visitor experiences under threat of extinction. Endangered species listing criteria, management effectiveness evaluation frameworks, and protocols used by UNESCO for world heritage sites provide valuable starting points.

Research that tests the effectiveness of particular management interventions aimed at ameliorating threats to experience is, of course, a high priority. Adaptive management seems well suited to help here. The need for a better understanding of the site attributes–benefits relationship has been mentioned previously in this paper as an obvious, important research focus (McCool et al., 2007). Also essential is focusing on the efficacy of interventions designed to influence perceived and real benefits of visiting parks and thus shift the market position of national parks. This is an avenue of research that is particularly relevant for agencies that are not only concerned with mitigating threats to the experiences available in parks, but that have an interest in enhancing the benefits of parks to visitors and society more broadly, with an eye on harnessing these outcomes to broaden societal support (Eagles, 2013).

Embracing technology and evaluating its effectiveness are central to preventing the extinction of experience and possible demise of parks. Research into the effectiveness of communication strategies by national park management agencies is essential, with such strategies directed towards enhancing experiences as well as engendering broad support for the

parks themselves. Social media is an obvious focus given its almost universal penetration into younger age groups who will become critical to the support of parks into the future.

In conclusion, national park management agencies cannot afford to be complacent about the implications of the extinction of experience. The loss of opportunities to experience and engage with nature, even in regards to just some segments of society, is potentially damaging to public support and to the future of national parks. As agencies charged with the responsibility of protecting and sustaining nature and heritage environments and values, park managers have an obligation to protect and sustain not only these environments but also the visitor experience itself in these places.

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