An international perspective on tourism in national parks and protected areas.

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Abstract

National parks and other protected areas continue to grapple with the complexities of dual management mandates. Since the establishment of national parks one of the driving motivators in many parts of the world has been that these places provide opportunities for recreational activity and enjoyment by people. However, they are the major mechanism globally for the conservation of biodiversity and many parks have been established primarily for this purpose. Yet even within these areas tourism remains one of the activities permitted by management agencies. National parks have also traditionally received little funding to support conservation efforts and park budgets continue to decline. Consequently, for many nations tourism provides the foundations for their parks continued existence. National parks and tourism are therefore closely linked. The dependence on tourism and requirement for parks to become increasingly self sufficient is now a dominant feature in many countries, but what are the potential threats and opportunities associated with such land use in parks? I first review some of the principal threats to national parks arising from tourism (e.g. visitor use, infrastructure), and then place these in the context of potential benefits to parks. I present recent data on the importance of tourism revenue to parks and show how species conservation benefits from tourism to protected areas. I also explore other mechanisms that can deliver benefits and what strategies agencies are adopting to deal with these challenges globally.

Keywords: Conservation, threat, opportunity, benefit, recreation

Introduction

National parks have been features of landscape use patterns for decades, although their specific purpose differs amongst regions. National parks management often differs depending on the emphasis placed on conservation versus the provision of recreational opportunities. Commonly national parks are of significant natural beauty and are frequently regarded as national icons established to protect representative examples of a nation's natural and cultural assets (landscapes). However, in some places the driving forces behind establishing parks was so they could be enjoyed by people and used for recreational purposes (Eagles *et al.* 2002). For others, these locations may not hold such value due to issues related to expulsion, dispossession of traditional rights to land and exclusion from parks (Naughton-Treves *et al.* 2005).

These examples represent a continuum of management objectives within national parks, with an underlying recreational focus in a dynamic socio-economic environment (McNeely 2005; Uddhammar 2006). The IUCN captures the essence of the variation in the purpose of parks, with six different categories ranging from Category I (strinct protection – e.g. wilderness) to Category VI (sustainable use of natural resources – e.g. managed resource reserve). Those with dual mandates include Category II parks where management objectives focus on the protection of natural, scenic and cultural areas, maintain ecological functioning, exclude the exploitation of natural resources, consider the needs of indigenous communities, and provide visitor access while minimising impacts.

The multiplicity of management objectives often results in conflicts amongst the range of user groups and again the extremes are dominated by preservationist versus utilitarian philosophies (Wyman *et al.* 2011). It is widely acknowledged that national parks and other protected areas are critical for the continued conservation of global biodiversity (Watson *et al.* 2010), but these areas are not sufficient to stem ongoing declines in our natural resource base (Butchart *et al.* 2010; 2012; Hoffmann *et al.* 2010). Furthermore, as human populations expand, threats facing these parks increase. This places political pressure on parks to justify their continued existence, particularly in developing countries where social issues (e.g. health, education, provision of essential services etc.) carry greater weight than conservation. Even in developed nations the relative contributions to national conservation efforts is well

below allocations to social welfare, education, health, and defence. For example, in the 2012 national budget for Australia the national parks estate and environmental protection in general received only 1.1% of total budget allocations,. Globally, the economic benefit from protected areas far outweighs the funds diverted to protect these networks (reviewed by Buckley 2009).

National parks face increasing budget restrictions and arguments for them to become self-sufficient abound. Herein lies both opportunity and threat in that parks can support a range of land uses in addition to biodiversity conservation. One of these land use options is of course tourism in its various forms (e.g. mass tourism, nature-based tourism, ecotourism, responsible tourism, sustainable tourism).

Tourism is a major industry supporting the global economy and one of the principal activities within national parks. The nature-based or ecotourism sub-sector is significant, increasing demand for natural attractions in the majority of global destinations (Balmford *et al.* 2009). While the recreational value of national parks continues to increase, their relative contributions to biodiversity conservation have also escalated due to the ongoing loss and degradation of surrounding landscapes. Therefore tourism could have significantly greater impacts on biodiversity within national parks today than in the past.

Tourism threats within national parks and protected areas have been the subject of much scientific study and public scrutiny. Much of this work has investigated the impacts of visitors and tourism infrastructure on the natural environment (e.g. wildlife disturbance, campsites, track networks, human-wildlife conflict etc.) (Buckley 2004; Monz *et al.* 2010; Pickering and Hill 2007; Pickering 2010; Steven *et al.* 2012), but there is also a plethora of work investigating the visitor experience (e.g. enjoyment, overcrowding, user group conflicts) (Choi and Sirakaya 2006; McCool 2006; Coghlan 2012). Other factors that need to be considered when assessing tourism impacts include global tourism trends, changing politics and values. Park management agencies may have little control over impacts on park values or user group values of national parks as these may be directed by higher level decision-making. Furthermore, the commercialisation of tourism products (including the development

of tourism infrastructure) (Buckley 2009), and climate change impacts associated with travel and tourism also need to be quantified.

One of the central factors that affects the degree to which tourism may impact upon the natural values of parks is the type of tourism activity, the distribution of visitor use within the park, and the monitoring and management of visitor impacts (Castley *et al.* 2009; Monz *et al.* 2010). Buckley (2002) has previously presented a series of draft principles guiding tourism in protected areas and I do not attempt to expand on these here. Suffice to say that tourism activities need to be considered in the context of the core conservation objectives for the park, and the relative importance of aspects such as wilderness, biodiversity values as well as the intrinsic value of the landscape as a whole.

For many parks, even those with high visitation, extensive infrastructure nodes and networks of hardened tourism infrastructure, effective zonation and bans on inappropriate high impact activities can minimise impacts. For example, in Yosemite National Park in the USA some 95% of the park is zoned as wilderness while the bulk of tourism activities are concentrated in the central valley. The key message here is that regardless of the nature of tourism activities within national parks, once the decision to open the park to visitors is made there will be visitor impacts.

One of the primary threats associated with increasing tourism activities in national parks relates to the development of tourism infrastructure. This has been an issue for park management for decades (Fitzsimmons 1976; 1977), and is one of the ongoing areas of concern with Australian reserve networks. However, in other parts of the world (e.g. United States, Southern Africa, South America) tourism infrastructure in national parks is not uncommon (Wyman *et al* 2011). For example in the Kruger National Park, South Africa there are 13 main camps (all with variable types of camping and build accommodation facilities), five bushveld camps, two bush lodges and two overnight hides which had in excess of 900 000 bed nights sold in 2011/12 at 60% occupancy (J. Stevens, pers comm. 2012). In addition to these facilities that are operated by South African National Parks (SANParks) there are an additional nine luxury lodges that are operated by concessionaires. Of course such tourism

infrastructure does have impacts, but tourism to the Kruger National Parks and the revenue accruing from this is the backbone of financing SANParks operations.

Within national parks, park management agencies have embarked on strategies to award concession contracts to commercial entrepreneurs to provide a range of tourism services (Wyman et al. 2011). These range from outsourcing hospitality services (e.g. restaurants and souvenir shops), to providing alternative accommodation opportunities. Impacts associated with such concession developments can be managed and mitigated through the formulation of strict contractual requirements with concession operators. These requirements should relate not only to the financial returns that could accrue to the parks agencies but should also address environmental impacts, social development and constituency building (Pfueller et al. 2011; Wyman et al. 2011). Two of the key criteria for concessions within US National Parks are whether these are 'necessary' or 'appropriate'. In this context 'necessary' relates to those operations that add value to existing tourism services, are not available nearby (e.g. in gateways), and provides a unique experience. 'Appropriate' developments are those that do not conflict with the fundamental parks management values and objectives. A central consideration with any potential commercial operator within a national park is that a standard contractual agreement is unlikely to be relevant in all cases. Each potential contract should be evaluated on a case by case basis to assess potential costs (both environmental and social costs) and benefits.

As stated previously park budgets are insufficient, but the revenue that tourism contributes to national park operations at a global scale is also highly variable. Park budgets for a number of countries rely heavily on tourism, primarily by charging entrance fees and associated costs for accommodation and tourism activities within parks. However, others receive relatively little by comparison (Bovarnick *et al.* 2010; Bruner *et al.* 2004; Mansourian and Dudley 2008). Generally developing nations have a greater dependence on tourism revenues that developed nations and this also makes these nations, and their national park systems, more vulnerable to fluctuations in the global tourism market. Revenues to parks are often not captured at a local level with funds being diverted to central government, or potentially even tourism operators. However, in cases where park management agencies are able to retain

revenue generated this can be important in funding conservation related activities, such as protected area expansion, anti-poaching, habitat rehabilitation etc.

More recently a global analysis of the contribution of tourism revenue to threatened species conservation has demonstrated that tourism revenues generated by parks protect significant proportions of global populations for a number of threatened vertebrates (mammals, frogs and birds) (Buckley *et al.* 2012; Morrison *et al.* 2012; Steven 2011). This is simply because significant sub-populations occur within these protected areas globally and tourism is fundamental to the ongoing protection of these landscapes. Without tourism these populations would be a much greater risk that what they currently experience.

One of the additional benefits of tourism to national parks is the downstream benefits beyond the finite boundaries of many national parks. National parks are no longer managed in isolation adaptive management strategies that are more inclusive of myriad stakeholder groups. In some countries benefits accrue through the development of gateway communities supported by peripheral tourism developments (Bennett *et al.* 2012). In others tourism services provided within the national park provide employment opportunities for residents of local communities neighbouring parks in addition to local businesses benefiting from parks sourcing goods and services from the local area. Deriving tangible benefits from tourism activities within national parks can result in a stronger attitude to conservation among local communities (Liu *et al.* 2012; Snyman 2012), but this may be dependent on local and historical circumstances. This is an important aspect for many national parks in developing nations where communities were removed from their lands to facilitate the establishment of national parks.

Reconciliation efforts are currently underway in many countries where local communities were disposed of their traditional lands. As communities lay claim to these areas within national parks, tourism is one of the mechanisms being used to ensure that the land itself is retained for conservation while bringing financial and social development opportunities for these communities. Examples of these from South Africa include the Makuleke and Khomani San land claims that have seen the

development of tourism infrastructure in former national park lands that have been handed back to these communities (Uddhammar 2006).

Tourism to national parks has also resulted in the escalation of tourism enterprises outside national parks. Those with a nature-based or ecotourism emphasis can have complimentary conservation outcomes. For example, in some southern African countries the proliferation of private ecotourism destinations (e.g. private game reserves) has contributed to the large scale conversion of previous agricultural land to conservation land use (Castley 2010; Cousins *et al.* 2008).

The preceding overview has provided only a glimpse of the potential threats and opportunities arising from tourism within and surrounding national parks. It provides some global perspectives and examples to illustrate these points. In closing, the key message being conveyed is that regardless of the nature of tourism within national parks, these will have impacts. There are also a number of examples that demonstrate that tourism is critical to sustain conservation in some areas. The way forward for tourism in national parks is not clear cut and each opportunity requires a detailed individual assessment that considers the values, needs, costs and benefits to all stakeholders.

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