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Management implications of tourist behaviour

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Information paper submitted by ASOC¹

Abstract

Many actual and potential impacts of tourism result from the behaviour of individuals, within the broader context provided by factors such the type of tourism; the rules and regulations applicable to various situations; and the level of supervision. An understanding of basic tourist behaviour is relevant to building a picture of tourism that can be used to inform management decisions. This information paper examines aspects of Antarctic tourist behaviour in the context of current tourism trends, and discusses the implications for tourism regulation and management. Antarctic Treaty Consultative Parties should tackle tourism regulation and management from a strategic perspective, including through using specially managed and protected areas as tourism management tools, rather than focusing on regulating specific tourist behaviour through site-specific guidelines.

Overview

Many actual and potential impacts of tourism result from the behaviour of individuals, within the broader context provided by factors such the type of tourism; the rules and regulations applicable to various situations; and the level of supervision. Consequently, an understanding of tourist behaviour is relevant to building a picture of tourism that can be used to inform regulation and management decisions, not only at the level of individuals but also at more strategic levels. Based on recent empirical research (Lamers 2012, Roura 2012), this information paper examines aspects of Antarctic tourist behaviour in the context of current tourism trends (New Zealand 2012a, 2012b), and discusses the implications for tourism regulation and management.²

Antarctic tourist behaviour consists of interactions of various kinds between tourists and the environment.³ These interactions may result in environmental effects of various kinds, including some that would be regarded as “impacts” in management terms, according to the criteria of the Madrid Protocol. The range of equipment that different kinds of tourists use, such as cameras, kayaks, climbing equipment, and skis, expands the range of tourist-environment interactions, and also the range of potential impacts.

Current trends in Antarctic tourism and tourist behaviour

The CEP tourism study (New Zealand 2012a, 2012b) identified several issues that are of particular concern to Parties regarding environmental impacts and gaps in tourism regulation. These include trends of tourism diversification and expansion; cumulative impacts; and issues of implementation and compliance. These issues are interlinked and, taken individually or together in various combinations, influence the impacts of tourism on the environment. Below, each of these issues is examined from the perspective of behaviour.

Diversification

Roura (2012) examined tourist behaviour based on observations made by tourists in their weblogs. A total of 50 different tourist groups (singles, couples, families, etc.) were examined. Tourists travelled on ships of various kinds and in yachts. Even what can be regarded as “traditional” Antarctic tourism – that is, shipborne tourism where visitors conduct periodic landings at penguin rookeries, historic sites, and other archetypal Antarctic sites – consists of a broad range of diverse activities and forms of behaviour. Behaviour ranges from walking around, sightseeing and taking photographs, to kayaking and camping overnight. Some

¹Lead author: R. M. Roura with editorial comments by J. Barnes, C. Christian, J. O'Reilly, T. Tin, and R. Werner.

² Other publications examining aspects of human behaviour as they apply to Antarctic visitors include Davis (1995), Riffenburg (1998), Ecuador (2007), Maher (2010), and Roura (2011).

³ For a discussion of tourist-environment interactions including theoretical framework see Roura (2012).

forty thousand tourists travel to the Antarctic every year, and together they conduct several hundred thousand person landings in Antarctica. Each landing results in myriad tourist-environment interactions, some of which are bound to cause environmental impacts of varying intensity and duration.

When a broader range of tourism activities is considered, the scope for potential forms of behaviour increases accordingly, and so does the range of potential environmental impacts. Lamers & Gelter (2012) studied a group of tourist divers as they conducted landings, together with non-divers, interspersed with their diving activities. Some divers wore their wetsuits not only for diving but also during excursions ashore, to wade into the water, and to swim. They became, in effect, amphibious tourists. In doing so they engaged in forms of behaviour that were not available to those without such equipment. Lamers & Gelter (2012) concluded that diversified activities generate a broader variance in attitudes and behaviours, which have environmental implications. For example, wetsuits can be a vehicle for carrying non-indigenous species.

Expansion

Currently tourism is conducted, with varying levels of frequency, at 300+ sites throughout the Antarctic, most of which are in coastal areas and are accessed by ship. Each site used for tourism purposes serves as the scenario where different forms of behaviour unfold. As noted above, behaviour is influenced by site-specific characteristics so that, for instance, discrete locations where wildlife is present may receive more visitors than adjacent locations without such wildlife; a prominent hill may be used as a lookout; a sheltered bay may be used to launch kayaks, etc.

Tourism is currently expanding most rapidly in inland locations. Unlike the bulk of shipborne tourism, which is essentially mobile and focuses on accessing a string of coastal destinations, land-based forms of tourism use a limited number of sites not only as destinations on their own, but also as staging points to access other sites further afield. New locations endowed with diverse environments may allow for a broader range of activities and forms of behaviour. The trend of tourism expansion is resulting in greater access by tourists into new areas, including relatively pristine areas, with a new range of environmental impacts.

Cumulative impacts

Many of the actual and potential impacts of tourism depend on discrete visitor-environment interactions (e.g., approaching, walking on, touching). These are influenced by the circumstances in which these forms of behaviour unfold – individually, collectively and cumulatively – through the establishment and consolidation of “tourism destinations” in Antarctica. Cumulative impacts may occur at sites where tourism is one of several governmental or non-governmental activities, or where tourism is the only activity that takes place regularly.

As noted above, site-specific factors influence onsite behaviour. Sites endowed with certain attractions or especially suited for some activities will trigger particular forms of behaviour that, repeated frequently, can result in cumulative impacts. The obvious interest of tourists in Antarctic wildlife, and the regular use of wildlife sites as tourism destinations, further underscores the importance of individual and collective behaviour on tourism management, particularly regarding cumulative impacts.

Implementation and compliance

Antarctic tourism is regulated by a number of instruments, both generic to most Antarctic activities and specific to tourism, which are adopted by Antarctic Treaty Consultative Parties or the industry. However, many aspects of tourism are not currently subject to legally binding regulation. The effectiveness of regulation depends to a large extent on tourist behaviour regarding implementation and compliance, which is obviously influenced by how expedition leaders explain and enforce the rules, and the quality of background materials and briefings received in advance of and during the trips.

An examination of tourist blogs highlighted general explicit awareness and/or general implicit compliance with various basic guidelines, and also some instances of non-compliant behaviour (Roura 2012). Compliance is bound to be imperfect because of issues of knowledge, choice, and various forms of pressure on visitors – weather, schedule, maximising returns from the experience, etc. – that may cause them to shortcut or bypass rules and regulations. Some tourists will not be compliant (whether occasionally or

frequently) as a result of unintentional human error or intentional behaviour, or a combination of both. It should be noted that even infrequent or short-term behaviour may result in lasting environmental damage.

Management implications

ASOC has made a series of recommendations regarding the regulation and management of Antarctic tourism, based on strategic analysis (ASOC 2010, 2011, 2012 and refs.). ASOC recommended, *inter alia*, that Parties should: (1) ensure that key legally binding instruments that were still not fully in force become effective as soon as possible; (2) advance from non-binding to binding regulation in implementing the general principles of Resolution 7, 2009 by means of Measures; (3) identify and address gaps in existing tourism regulation; (4) review and improve how EIA is applied to tourism; and (5) use specially protected and managed areas (ASPAs and ASMAs) proactively as strategic tourism management tools. When tourism is examined from the more narrow perspective of individual behavior, these recommendations remain relevant. In particular:

- At present, the most favoured way to regulate and manage tourism is through the use of site-specific guidelines, which have an emphasis on the behaviour that is expected at particular locations according to site-specific factors. Site-specific guidelines are useful to manage visits at particular sites, although they should be designed and implemented with awareness that behaviour cannot be regulated minutely, and that implementation is likely to be imperfect, despite the good will of tourists and tour operators. Consequently, behavioural guidelines should complement, but not substitute, other forms of tourism regulation and management.
- Issues of tourism diversification and expansion should be addressed through the EIA process, so that additional attention is paid to novel activities or to activities that take place in new sites where limited activity has taken place previously, including tourism. This would also require reviewing the effectiveness of EIA as applied to tourism.
- The repetitive use of particular sites as tourism destinations (which may or may not also be the subject of non-tourism uses) raises concerns about potential cumulative impacts resulting from tourism, by itself or in combination with other activities. However, environmental monitoring at sites regularly used for tourism purposes is limited at best, and absent at many sites. To the extent that some level of monitoring exists, it is usually not able to identify the precise tourism footprint relative to that of other activities or processes. Environmental monitoring should clearly increase, but in the short term it is unlikely to provide sufficient information about tourism impacts that can be fed into tourism management. In this context, precautionary action should be used in tourism management until there is more knowledge about tourism impacts.
- ASPAs and ASMAs can be used proactively as tourism management tools, so that tourism is concentrated, diverted or dispersed as required. The idea is not to exclude tourism arbitrarily from particular sites, but to protect fundamental values that may not be compatible with regular tourism. In particular, ASPAs can be designated to protect sites that meet the criteria of Annex V, Art. 3(2) of the Protocol, many of which require no or minimum human interference, before they become established tourism destinations. ASMAs can be designated to assist in the planning and coordination of contemporary or future activities including tourism, prevent conflicts, and minimise cumulative impacts.
- Precautionary action could be complemented with an adjustment of site guidelines to respond to obvious emerging environmental issues. This was the case recently, for instance, with respect to path development at Aitcho/Barrientos Island (CEP 2012, paragraphs 142-147).

Concluding remarks

An examination of tourist behaviour provides insights on Antarctic tourism that are complementary to other perspectives, contributing to a better overall understanding of this activity and its effects on the environment.

Adequate knowledge of tourist behaviour is important since many of the impacts of tourism result from the behavior of individuals.⁴

Examined from this perspective, the diversification and expansion of tourism result in an ‘explosion’ of ways in which people-environment interactions occur, with potential consequential impacts on the environment, including cumulative impacts. In this context, ASOC suggests that Parties tackle tourism regulation and management primarily from a strategic perspective, including through the proactive use of ASMAs and ASPAs as tourism management tools. Behavioural guidelines would usefully complement, but not substitute, strategic approaches to regulate and manage tourism.

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⁴A similar approach could be applied to examine the behaviour of scientists and logisticians both during work and recreation (e.g. Riffenburgh (1998), even though in those cases the management and regulatory context would be somewhat different than for commercial tourism.