

Gap Analysis Of Future Studies On Wildlife Tourism In Lower Kinabatangan, Sabah

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The value of wildlife as consumptive or non-consumptive ecotourism activities are evident in many research carried out in the field of wildlife tourism. The Batuh Puteh (Orang Sungai) community of Lower Kinabatangan, Sabah has successfully adopted a combination of an 'authentic' vacation where tourists are open to new cultures and experiencing the natural endowment in the form of non-consumptive wildlife tourism activities. Hence, the objective of this paper is to determine the world-wide view on the concept of wildlife tourism and what are the gaps of future studies in this field for a destination that is known for wildlife tourism. Information for the study was gathered from case studies and articles from a selection of countries based on the notability of their wildlife tourism ventures. The analysis of these cases will be used to review and propose recommendations for further research in the Lower Kinabatangan, Sabah. The suggestions of sustainability, Stakeholder Corporation, biodiversity management, ethical nature values and environmental education and awareness are particularly important to wildlife tourism researchers and decision makers. The analysis from the literature will be useful in finding the gaps of future studies on wildlife tourism in Malaysia with specific reference to Lower Kinabatangan, Sabah.

Key words: wildlife tourism, ecotourism, wildlife management, Miso Walai Homestay, Lower Kinabatangan, Sabah

Introduction

Tourism has become a diverse sector from its traditional sun, sand and sea vacations to alternative tourism vacations and also to niche tourism. These ventures can be as extreme as dark tourism to nature oriented activities. In recent years, national parks and protected areas have been redefined to encompass global issues of unsustainable use of the environment. Although there are set classifications of parks and protected areas by IUCN (International Union for Conservation of Nature) the system is based on ecological values to conserve and manage sustainably (IUCN, 2012).

It is thought that ecotourism holds the key to protecting natural resources from consumptive use activities that may not be sustainable. According to Vaughan (2000), in regions of high biodiversity, or highly charismatic fauna, ecotourism represents 40

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- 60% of international tourism, whereas 'wildlife related' tourism accounts for 20 - 40%. He also mentioned that this is currently a growing industry which in regions of high biodiversity percentage is classified as 'mega diversity' countries with 60 – 70% sheltered by Brazil, Colombia, Ecuador, Peru, Mexico, Congo (formerly Zaire), Madagascar, China, India, Indonesia, Malaysia, and Australia.

Malaysia is currently marketing the image of a multicultural society representing the Malays, Chinese, Indians and other ethnic groups in the Tourism Malaysia tagline, 'Malaysia Truly Asia' (Hamzah, 2004). In keeping with this theme, wildlife tourism can also be a prominent part of portraying cultural richness in a natural environment. Initiatives such as MESCOT an acronym for Model Ecologically Sustainable Community Conservation and Tourism was founded by members of the Batuh Puteh (Orang Sungai) community in 1997, who then formed the current community based ecotourism cooperative (KOPEL Ltd) in 2003 and the Miso Walai Homestay programme. This combination can become an element of an 'authentic' vacation where tourists are open to new cultures and natural endowment in the form of non-consumptive wildlife tourism activities. Extensive research on ecotourism and wildlife tourism is said to be conducted in Africa and Central America, however, Kruger (2005) noted that Asia and South America is not receiving sufficient focus in terms of ecotourism studies given their vertebrate endemism level.

Hence, the main objective of this paper is to determine the world-wide view on the concept of wildlife tourism and *what are the gaps of future studies in this field for a destination that is known for wildlife tourism*. This study will be important in identifying the research gaps in a wildlife tourism destination in Malaysia with specific reference to Lower Kinabatangan, Sabah. In recognising the areas of interest in other scenarios and countries, researchers will be able to use the outcome of this study to focus on developing new concepts and management practices for wildlife tourism.

Literature Review

Within the broad concept of sustainable development there has been on-going international efforts to promote sustainable tourism development in what is known as the Agenda 21 during the 1992 Earth Summit in Rio de Janeiro (Brazil) organised by United Nations World Tourism Organisation (UNWTO) and the World Ecotourism Summit to name a few. It is thought that sustainable tourism is the management of all resources and it should benefit the environment and local community with the least impact possible and the aim to conserve and protect cultural and natural resources (Neto, 2003).

Many countries have adopted ecotourism initiative as a form of tourism pioneered by Ceballos Lascurain in 1991. In particularly countries such as Belize, Botswana, Rwanda, Uganda, Madagascar, Bolivia, Australia, Costa Rica, Ecuador, South Africa, India, USA, Malaysia and Kenya have successfully adopted ecotourism with the establishment of national parks and nature reserves (Lonelyplanet, 2012; Foat, 2012).

Many countries such as Ethiopia, Costa Rica, Indonesia, India, Rwanda (Vreugdenhil, *et al* 2012; Sarkar and George, 2010; Antonio and González 2009; Krüger, 2005; Walpole and Goodwin, 2001) have done extensive research on particular species of which they have adopted as their 'flagship' species. In many instances, 'flagship' species create the mark of a country that attracts tourists. Some of these examples include in India's Bengal Tigers, Thailand's Asian Elephants,

Costa Rica's Green Macaw, and Guyana's Leatherback Turtles. As in the case of Rwanda, the importance of flagship species has estimated to account for 75% of all tourism income (Kruger, 2005). Malaysia is well known for its richness in endemic biodiversity, in particular the Borneo Island that houses the state of Sabah and Sarawak its flagship species are noted as Bornean orang-utan, Bornean pygmy elephant, Sumatran rhinoceros and the Sundaland clouded leopard (WWF, 2012). Some of the well-known wildlife tourism projects in Sabah include the, Bornean Sun Bear Conservation Centre, Turtle Island Marine Park, Tabin Wildlife Reserve, Labuk Bay Proboscis Monkey Sanctuary, Sepilok Rehabilitation Centre in Sabah.

Scope and Classification of Wildlife Tourism

According to Higginbottom (2004), the scope and classification of wildlife tourism consists of key variables which are commonly used to classify forms of wildlife tourism. They include the Consumptive Wildlife Tourism (CWT) and Non-Consumptive Wildlife Tourism (NCWT):

Consumptive Wildlife Tourism (CWT)

CWT is when animals are being deliberately killed or removed, or having any of their body parts utilised or consumed. As defined by Higginbottom, (2004) they are defined as follows:

“Consumptive use of wildlife for recreation involves the capture or killing of target animals. It can be in the form of (a) recreational hunting of waterfowl and big game (may also be valued for meat), (b) recreational fishing (fish may be released after catching or valued for food), or (c) trophy hunting and fishing (the trophy itself may be valued as well as the thrill of hunting itself)”

Non-Consumptive Wildlife Tourism (NCWT)

NCWT is when wildlife is utilised as a tourism product (Sinha, 2001). According to his definition:

“Non-consumptive tourism involves recreational activities that neither catch nor kill wild animals. Wildlife watching, video-recording and photographing is the most common forms of non-consumptive recreational activities”

Wildlife tourism can also take in the form of captive and semi-captive scenarios such as zoos. As described by Tribe (2004), the success of animal-based attractions and their role in conservation is realized by activities such as genetic management and captive breeding. Such examples in Asia are the Singapore Zoo, Sepilok Orang-utan Sanctuary, Tabin Wildlife Reserve, Bornean Sun Bear Conservation Centre and Lok Kawi Wildlife Park where within these facilities the focus is on breeding endangered species. Whether or not facilities are deemed as having the interest of the initiative of increasing species population and reintroducing them back into the wild is left to be monitored by the authorities.

Methodology

The research objective for this study will be achieved through the qualitative method of thematic analysis of the different definitions relating to rural tourism in existing literature. Thematic analysis can also be referred to as hermeneutics where the authority of concepts, constructs, or categories does not reside in the concepts

themselves but within the dialogically arrived at of people to consent to them (Jamal & Hollinshead, 2001). The selection of articles focused on key words such as wildlife tourism, ecotourism, sustainable tourism, responsible tourism, wildlife management, wildlife values, local community and tourism in Malaysia as well as countries that have adopted such forms of tourism to its success. The database also covers literature from both natural sciences and social sciences fields, as ecotourism lends from both areas.

The authors' suggestions and recommendations were taken into consideration in formulating further areas of study interest for Lower Kinabatangan, Sabah. A total of 42 articles relating to international studies and studies conducted throughout Malaysia were identified from which common areas of ecotourism and wildlife tourism were extracted and analysed. Review of the literature serves the purposes of contextualizing the assessment, drawing on all available resources gathered by previous authors in their respective fields. This can be in the form of electronic, archived documents in the field or administrative centres of the study location.

Results And Discussion

Brief Summary of Research on Wildlife and Tourism

In recent years, case studies done in Kenya, USA, China, Europe and Malaysia by numerous researchers (Davidoff, 2012; Hedlund, 2012; Bhuiyan, 2012; Chye, 2010; Shani and Pizam, 2008; Myers, 2007; Abdullah, 2006) have included wildlife value studies and animal based tourism attractions with the intention of evaluating and adopting new management plans to changing views on animal functions.

The importance of measuring and minimizing visitor impacts in protected areas, environmental protection, biodiversity and backcountry camping has been emphasized by a number of authors focusing on areas within the USA, Australia, India and Costa Rica (Guogang, 2012; Wilson, 2012; Gonzalez, 2009; Marion and Reid, 2007; Tadt, 2007; Leung and Farrell, 2002; Isaacs, 2000; Syamlal, 2002; Horowitz, 1998).

More specifically, it was suggested in many of the studies that managers and scientists may not perceive the role of science in sustainably managing wildlife in similar ways (Rodger and Moore, 2004). Studies done by many researchers (Sarkar, 2010; Zalatan and Gaston, 1996; Simpson, 1993; Nair, 2005; Gossling, 1999; Azima, 2012; Said, 1999) included various types of tourism as alternatives to mass tourism. One such alternative tourism or niche tourism identifies with the role of community based tourism which encourages community participation. This is evident in many research conducted in countries such as South Africa, Indonesia, Malaysia, Kenya and United Kingdom (Simpson, 2007; Ayoo, 2007; MacIntyre, 2007; Wickens, 2003; Hussin, 2008). In regards to Lower Kinabatangan, Sabah, many local researchers have included conservation, biodiversity as well as tourism studies of the area (Razzaq 2012; Ambu, 2008; Hussin, 2008; Hai, 2001).

Key Areas for Further Study within the Context of Lower Kinabatangan, Sabah for a Sustainable Destination

From the analysis of literature, the following areas require further studies as indicated in Figure 1:

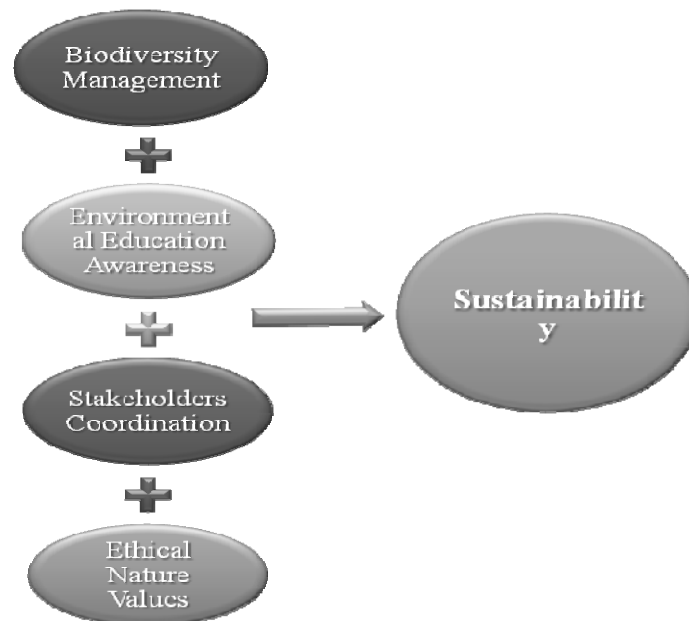


Figure 1: Key Areas of Research for Wildlife Tourism in Lower Kinabatangan, Sabah

Biodiversity Management

Majority of tourism research have included both positive and negative effects of tourism on biodiversity which is mainly reported in environmental journals (Marion, 2006; Krüger, 2005; Chardonnet, *et al* 2002). As noted by Buckley (2003), there are many systems and indicators that are inadequate to manage tourism impacts because ecological and management indicators are not feasible and therefore impracticable to managers. Buckley encourages ecological baseline data and the need for joint partnerships between tourism specialists and biologists or environmentalists as well as the need to implement. This devotion of time and resources to visitor management have been seen as a distraction to the main core value initially sorted in the formation of protected areas, which is to conserve and protect ecosystems. Studies conducted by Marion (2006) on the effects of ecological recreation on backcountry sites such as campsites and trails, indicated several negative impacts on biodiversity. These areas often utilized in tourism activities, thus, should be adequately monitored.

Dwelling on ecotourism as a concept that holds certain principles within sustainable development and as a marketing tool some authors such as Wood, (2002) considered the possibility of misuse of the term to gain positive leverage in the eyes of the public. Meanwhile, authors such as Smeding, (1993) have considered ecotourism in Botswana as being mostly positive as it seeks to protect the environment and local communities living around parks.

However, in terms of land mass and ecological worth not all protected areas are substantially managed, large or flora rich enough to achieve its conservation objectives. Lower Kinabatangan is one such example. Due to major floods and forest fires the remaining evergreen swamps are extremely important as a water catchment area for biodiversity and local communities of Orang Sungai villages in Lower Kinabatangan. However, to an already damaged area due to unsustainable logging, plantation agriculture, mining and hunting challenges are faced to repurchase land from plantation owners to accomplish the aims of Heart of Borneo project (WWF, 2012). This result in the involvement of non-governmental organisation (NGO) such as WWF (World Wildlife Fund) working together with local communities such as

Batuh Puteh, the oil palm industry and the local government of Kinabatangan in an initiative to regain fragmented lands to ecologically useful areas for biodiversity.

Even though ecotourism may have best intentions and benefits to conservation and local communities, without planning and monitoring of all aspects, activities can have negative impacts on the environment. However, case studies of similar biospheres can be useful in planning and monitoring strategies bearing in mind that each area may differ in ecological balance due to its specific needs within the ecosystem.

Environmental Education and Awareness

In general, environmental education is communicated to the public through the use of international and national media. Hence, educating a society in being environmental consciousness is important not only for the tourism industry but for all society. Many tourism entities such as United Nations Tourism Organisation (UNTO), Global Sustainable Tourism Council (GSTC), United Nations Environment Programme (UNEP), and Association of Southeast Asian Nations (ASEAN) devised code of ethics and regulations to manage visitor movement in sensitive areas. Educational and awareness programmes utilize pre visitation methods by sending information before the visitor arrives to the destination as well as information during their stay. According to Marion and Reid (2007), there is need for research in the area of improving educational information given to visitors. They also mentioned that, visitor education is designed to persuade visitors to adopt low-impact practices appropriately. It is believed that once visitors are aware of damaging effects of their actions they would modify their behaviour to be more responsible. However, in some situations careless actions by visitors may impact the behaviour of wildlife. In instances where establishments experience visitors who approach animals too closely even though they were pre-informed by park managers, can be detrimental to both the animal and human.

In addition, education and awareness should also to be transferred to stakeholders involved in the development and implementation of tourism ventures. As a form of Community Capacity Building (CCB), local communities engage in learning processes that assist in developing initiatives. As an example, India's Sunderbans region holds one of the world's largest cats, the Royal Bengal Tiger (*Panthera tigris bengalensis*). Through actionable research, capacity building and environmental awareness the sustainability of the tiger has become an extraordinary case of wildlife protection in India (Sarkar, 2010).

Similar capacity building concept was also utilized by the MESCOT initiatives in Kinabatangan. According to Razzaq, Mustafa and Hassan (2012), there is a large body of literature stating that CCB is a core process in developing and strengthening local people. This concept was adopted by the United Nations Development Programme (UNDP) in 1998. They identified three (3) areas of significance - community, organisational and individual levels. Their study further revealed that the key success of community based tourism in the context of Miso Walai Homestay in Kinabatangan was due to community empowerment, planning, awareness, knowledge and skills throughout the stages of development. The community was able to work with WWF in an extensive research of the biodiversity in the area. The merge of human resources not only sparked the MESCOT initiative but it assisted in the vital work needed to gain information that lead to re-gazette the Lower Kinabatangan area in 1997.

Thus, environmental awareness has become necessary due to negative impacts on the environment worldwide. This sparked initiatives from NGO's, governments, companies and the general public in reducing further environmental damage through several methods including education and awareness.

Stakeholders Coordination

There have been limited extensive studies on stakeholder partnership with all entities necessary to gain a better understanding of the management practices of wildlife based tourism activities. For wildlife tourism within protected areas to be successful, it is necessary for the destination image to be well coordinated between the local community, governments, tour operators, tourists, NGOs and the land owners.

A positive destination image of any tourism venture is important especially on matters related to safety, security and stability of location and the country as a whole. Although tourists are aware of the possible dangers of nature based activities, the company should provide precautionary measures such as training guides in wilderness emergency and crowd management. Governmental institutions and NGOs can provide vital information and workshops to tourism companies. They can also assist in policy making and management techniques for companies without the necessary resource and information.

Many wildlife tourism activities are located in national parks and protected areas such as Belum National Park, Iwokrama National Park, Gir National Park, Chobe National Park, Kinabatangan Wildlife Sanctuary, Belum National Park, and Glacier National Park (Iwokrama Rainforest Research Centre, 2012; Chye, 2010; Tadt, 2007; Sinha and Sinha, 2008; Miso Walai Homestay, 2000). Sustainable use of parks is important as well as dialogue with indigenous communities in attempt to avoid conflict with their livelihood. This is the constant difficulty faced by indigenous communities during government decisions when allocating land for commercial use and even as protected areas and national parks. According to Egales, *et al*, (2000), previously many countries adopted a North American model of protected area designation, which resulted in the removal of indigenous population from within the protected area boundaries. However, in recent years, parks have adopted the function of protecting the environment and local communities within. As noted by Kruger (2005), in almost 40% of cases, the consequent involvement of local communities during planning, decision making or as a substantial labour source, made the ecotourism projects and ventures sustainable through reduced need to practise consumptive land use.

Similarly, the MESCOT Initiative has communal and individual rights to their lands which make it easier for the community to manage and control the area. This concept has worked in favour of the MESCOT Initiative and in its continued success. The involvement of all stakeholders from the initial stages and throughout is important to gain a clear perspective and view from all angles of the venture.

Ethical Nature Values

There are several views on the 'use' of animals by humans' which can vary from regions, countries, cultures, traditions or personal. Consumptive values of the ecosystem is generally calculated in terms of economical usage, however, calculating non-consumptive values are in fact a more difficult task that involves several methods both quantitatively and qualitatively.

According to Shani and Pizam (2007), since the influential book “Animal Liberation” was published in 1975 by the Australian philosopher Peter Singer, public concern over ethical treatment of animals has increased dramatically. As explained by Manfredro, Teel and Bright (2003), if the current economic and social trend continues a sustained erosion of traditional orientations toward wildlife is likely and the value orientations will shift from materialist to post-materialist values. They further stated that post-materialist tend to have better jobs, more education, and higher incomes than those with a materialist values set. This shift is seen in many western countries through changes in animal rights laws that will have its own impacts on the management strategies tourism industry.

Recently, Malaysia has incorporated Wildlife Conservation Act 2010, Sabah Biodiversity Enactment 2001 and Animal Act 1953 (Revised 2006) to assist in implementing stringent laws to be enforced. Within the structure of these laws, the tourism industry should focus on the manner in which animals are cared for with particular interest to endangered species. In the tourism industry animals are incorporated in various ways, captive in zoos; in the wild hunted or viewed; utilized for transport or for entertainment in circuses.

A major proportion of the value of biodiversity consists of non-use values. In the case of Batuh Puteh, wildlife viewing and conservation is one of the main sources of revenue for their community based ecotourism venture. With current tourist profile arrival trends of Sabah who are mainly from Japan, China, United Kingdom, Scandinavian countries, Europe, USA, Canada and Australia, the wildlife orientation of these countries should also be considered. The importance of this was expressed by Manfredro, Teel and Bright (2003) in their study, they highlighted that these constructs affect attitudes toward wildlife management and can be useful in guiding planning and programme implementation.

Thus, the implications of shifting values and animal rights should be considered in all nature based tourism oriented ventures. Value and ethical orientations of stakeholders is necessary in determining consumer preference, awareness levels, future management techniques in the establishment of regulations and management systems.

Sustainability

The essence of all development is to find the right equilibrium between profitability (i.e. development) and sustainability. From the analysis, sustainability can be achieved if all the four key areas of research discussed (see Figure 1) can be aligned.

As population growth increases and economic persuasion increases, the ideology of a simple life may be caught between the need to develop and the need to be sustainable. With this in mind, governments worldwide joined in the development of Memorandum of Understandings between countries such as Bulgaria, Romania, Guyana, Norway, Netherlands, and Denmark, under Article 6 of the Kyoto Protocol with the aim of combating global climate change, environmental degradation and protection of indigenous communities (Mitchell, 2012)

One such known memorandum is the Kyoto Protocol where countries of high carbon emissions will in turn provide financial support for countries that have a vast expanse of forest reserves remaining. One such country is Guyana whose Low Carbon Development Strategy (LCDS) was accepted by the Government of Norway to support REDD-plus Reducing Emissions from Deforestation and Forest Degradation in Developing countries (Kyoto Protocol, Retrieved March 20, 2012). As an outcome,

the then president of Guyana donated 371,000 hectares of forest to the world in 2009 (Iwokrama Rainforest Research Centre, 2012). Lower Kinabatangan was also given as a gift to the world in 2002 when the State Government declared the Kinabatangan-Corridor of Life as a “Gift to The Earth” (Kinabatangan Corridor of Life, 2009).

These initiatives from government levels are seen as plausible in the move towards a sustainable future, however, management and policy enforcement at ground levels and local levels are still being questioned. Whether or not there is a lack of human resource, finances or knowing the specific authority in charge of each area or situation, the purpose of ecotourism is being questioned. Green washing seems to be so rampant that identifying genuine ecotourism operators is becoming more and more difficult (Horiuchi and Schuchard, 2009)

In the research conducted by Kruger (2005), 188 case studies were analysed from Africa, Central America, South America and Asia. From this number, 70 case studies were classified as unsustainable and excluding local communities in countries such as Costa Rica, Nepal and even in Malaysia. He noted that almost half of all unsustainable case studies reported that ecotourism led to serious habitat alteration, mainly in the form of major habitat changes in order to accommodate more Eco tourists, serious trail erosion due to a high number of people or cars on a certain track and pollution caused by eco-tourists in mostly fragile areas, such as islands or mountain regions. In the publication, he also made reference of Malaysia, pointing out that large-scale habitat transformation has been taking place to enhance ecotourism experience. Nonetheless, sustainable case studies were seen to have conservation projects, local community’s involvement, flagship species, and non-consumptive use of wildlife, and also effective planning and management.

Therefore, there are movements towards sustainable actions in many aspects of societal development creating global outreach by governments. Initiatives such as REDD- plus is at the global level which serves to maintain present and future forests. For sustainability to be successful it is important to set strategies with the involvement of key stakeholders not only in present planning but also for its longevity. Initiatives at the local level should also create a sense of ownership throughout societal values, therefore, acknowledging nature as valuable even if not used by humans at present time but its untouched value to non-human animals and for future needs of human persons.

Conclusion

Tourism that involves the life of the mother earth’s animal kingdom should not be taken light heartedly. Although the levels of use of the ecosystem vary among individuals, groups, cultures and traditions the worldwide efforts for sustainable development are becoming a constant call of those directly and indirectly concerned for the future welfare of our planet. Whether we are dwell within a developed or developing nation the core value of the way we manage our resources for its longevity is all so important for the future generations.

In the past 3 decades rapid environmental degradation has been noticed to occur especially in areas of rich biodiversity and within reach of native communities. This particularly took centre stage during the 1980’s with the advent of technological advancement and the ability of the internet generation (Gen-Y) to gain access to information on a worldly basis.

Owing to the new learning curb of technology and environment concern, the value orientation has been noticed to be on a constant change towards a more eco-

centric society. Malaysia to keep up with changing views and their goal of becoming a developed nation by the year 2020, their welfare acts for both humans and animals should be enforced more stringently with in keeping with new amendments to the Wildlife Conservation Act 2010, Sabah Biodiversity Enactment 2001 and Animals Act 1953 (Revised 2006).

Although the authors have suggested definitions for wildlife tourism, some have also insisted that there is no clear definition of the term. However, the concept clearly encompasses some basic areas that should be taken into consideration when embarking on wildlife tourism ventures. There may or may not be one definition for wildlife tourism except in its basic form “tourism that involves encounters with non-domesticated animals either in their natural environment or in captivity” (Cooperative Research Centre (CRC), 2001). However, in each scenario management and monitoring with the core value of protection and conservation of the biosphere and its ecosystems is absolutely necessary. Therefore, tourism specialists should work closely with biologists and environmentalists when determining the most appropriate sustainable use of the topography of each area. This should also include improvements to regulations, decision-making and actions plans that include all stakeholders involved.

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