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Editorial

Preface: Special Issue on Environmental Impact of Nature-Based Tourism

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Received: 14 October 2019; Accepted: 14 October 2019; Published: 15 October 2019

1. Introduction

Tourism is growing rapidly throughout the world, including nature-based tourism, but natural habitats are shrinking. How do we avoid damaging what is left as an increasing number of visitors wish to experience nature or enjoy adventure or relaxation in natural surroundings? This issue explores various environmental impact factors, from the physical effects of trampling through the disturbance of wildlife to the attitudes of visitors and how well-run tourism ventures might modify their behavior.

2. Highlights

Runnström et al. [1] examine the impacts of recreational trampling on native vegetation communities in Iceland over four years, using experimental trampling and image analysis in highland and lowland regions. They demonstrate that although all vegetation types showed damage, moss and heath are impacted more severely than grassland, and highland communities are more affected than lowland ones. Therefore, they recommend that managers concentrate walking trails in lowland grasslands, and also recommend their methods as a time-saving procedure for similar studies in other regions. Croft [2] also discusses the problems of vegetation trampling and explores the possibility of moderating the effects of human walkers by following the trails created by large animals in Australia, Africa, and Europe, including advice on where this may not be appropriate, such as in locations where large predators await herbivores along trails. Bartoletti et al. [3] discuss results of stakeholder questionnaires on the impacts of trampling and other issues, such as waste disposal by adventure racers in Brazil. Not surprisingly perhaps, although all of the three stakeholder groups recognized positive impacts, national park managers were far more aware of negative impacts than were the organizers or the athletes.

Adewumi et al. [4] discuss stakeholders' views on trampling, waste disposal, overpopulation of deer, and other issues at popular tourism sites in Japan. Stakeholders agreed on some issues, such as the identification of trash as a major impact. Conflicting views arise on other issues, such as tour guides who lament the lack of deer along hiking trails, and managers' concerns that increased deer populations are having a negative impact on vegetation. Taff et al. [5] discuss the cultural benefits of natural areas to humans, such as emotional well-being, which can only be realized by visiting such areas, and the impacts on the environment that can accrue from such visits.

Thus, an increase in research in recent decades has improved our knowledge needed for conservation management, but what future research do we need to clarify issues that we still know too little about? Sumanapala and Wolf [6] review 145 articles in four journals relating to environmental management and sustainable tourism. They find Africa and Asia to be underrepresented in the

literature, and that aquatic activities such as rafting or diving were studied far less than terrestrial ones such as hiking or wildlife viewing. Well-known, charismatic animals and vegetation were studied far more than cryptic animals that could also be affected by tourism impacts, but are more difficult to assess. They make a plea for recognizing synergistic effects of multiple tourism activities and for more interdisciplinary studies to enhance management plans and techniques, such as visitor education.

Wolf et al. [7] discuss observational and experimental investigations of the impacts of tourism and recreational activities on wildlife, and some complexities involving interacting factors, such as the effect of vegetation structure on tourism impacts on wildlife and subtle effects not easily detected in short-term studies. They also discuss factors important to conservation management, such as types of access to wilderness areas, planning of roads and tracks, accommodation issues, visitor management via zoning and education, and the engaging of visitor interest by adopting low-impact technology for wildlife viewing. They identify ten areas of research that are needed for future management decisions, including impacts on cryptic species, effectiveness of management techniques such as visitor education and various aspects of human and wildlife behavior, how short-term responses of wildlife might translate into long-term ecological effects, and the assessment of complexities, such as impacts cascading from vegetation to wildlife.

3. Conclusions

This special issue provides insights into what we know about tourism and recreation in nature and what we need to know for future management decisions. Tourism [8], planning [9], and psychological [10] research all find an important relationship between nature-based experiences and the physical and psychological well-being of participants. In a fractious world, where anxiety mounts as an irreversible tipping point to habitable climate change approaches, the calm of nature will be increasingly important. The challenge for nature-based tourism is to take visitors down the sustainable and gentle path of communing with nature and to leave the conquest of nature to an ignorant past.

Conflicts of Interest: The authors declare no conflict of interest.

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