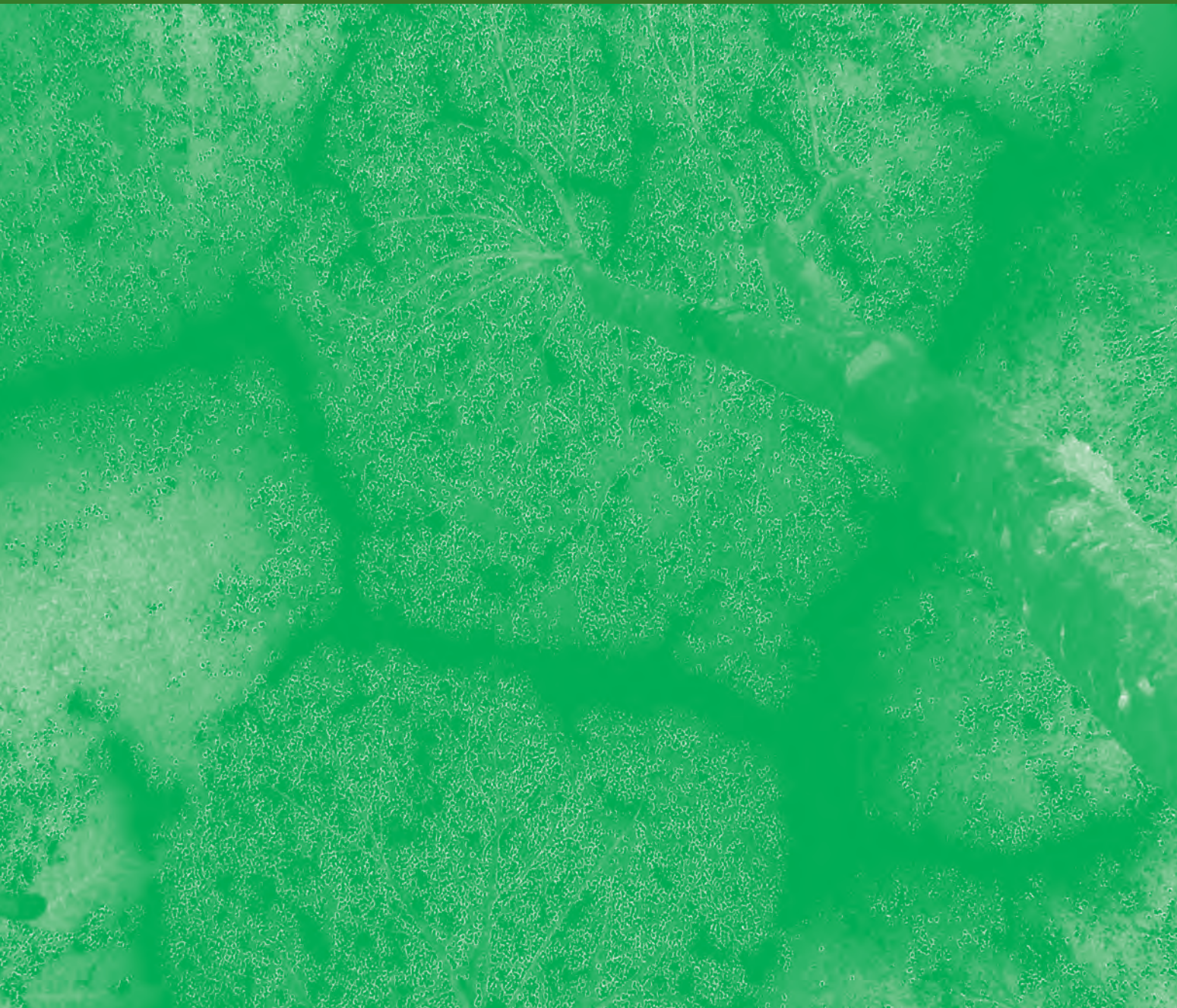


Tourism and Biodiversity

Achieving Common Goals Towards Sustainability



Tourism and Biodiversity

Achieving Common Goals
Towards Sustainability

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Foreword and Acknowledgements

This publication looks at the relationship between tourism and biodiversity, and assesses the way that tourism can contribute to the protection of biodiversity and enhance its role as a main resource for tourism destinations. It has been prepared in the context of the International Year of Biodiversity and particularly in preparation for World Tourism Day 2010 and the Tenth Conference of the Parties to the Convention on Biological Diversity (CBD).

The publication will also support UNWTO's activities on tourism and biodiversity in relation to the Rio+20 process, which focuses on a green economy in the context of sustainable development and poverty eradication and other related initiatives such as climate change and tourism, green economy, tourism and protected areas.

The research and writing has been undertaken for the UNWTO by Richard Tapper of the Environment Business & Development Group. Thanks are due to the staff of UNWTO, in particular to Sofía Gutiérrez, Programme Officer, for the concept, supervision and final editing of the paper and to Luigi Cabrini, Director, both of the Sustainable Development of Tourism Programme, for his overall coordination and review; to Marcel Leijzer, Deputy Chief Technical Cooperation and Services Programme; and to the UNWTO Consulting Unit on Tourism and Biodiversity for its timely comments. Special thanks are due to Oliver Hillel, from the Secretariat of the Convention on Biological Diversity for his helpful feedback and comments.

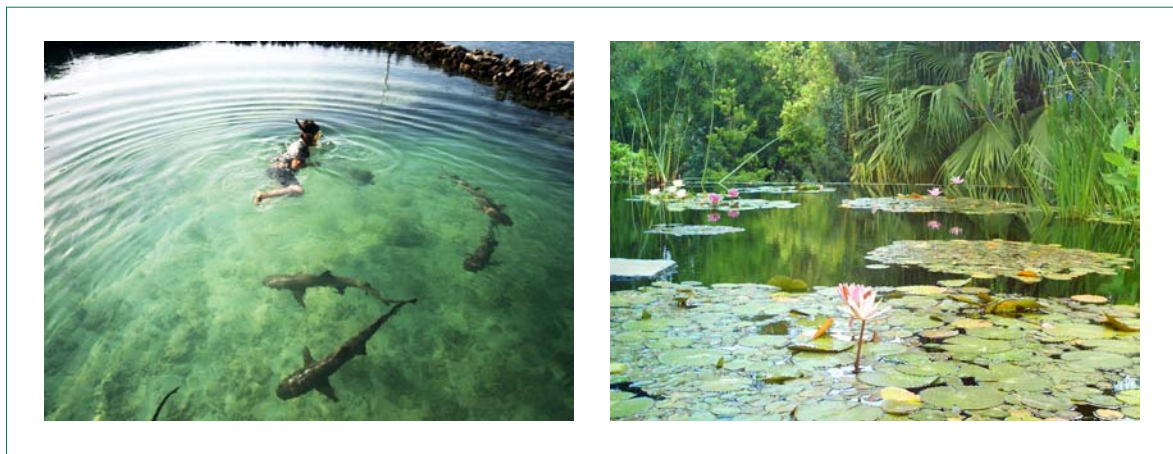
All photographs included in this publication are from participants in the UNWTO Photo Competition 2010, Tourism and Biodiversity, as part of the World Tourism Day celebrations. The cover photo was taken by Tripti Pandey.

Introduction

1.1 Tourism and Biodiversity

Biodiversity is vital for tourism. Coasts, mountains, rivers and forests are major attractions for tourists around the world. Tourism in the Caribbean, Mediterranean and much of Southeast Asia depends strongly on the recreational opportunities provided by their coastal environments. In southern and eastern Africa, tourism based on wildlife safaris is a dominant attraction and source of income for the tourism sector. Wildlife and landscapes are important attractions for tourism in mountain areas.

Biodiversity plays different roles in different types of tourism. All tourism – even in city centres – relies on natural resources for supplies of food, clean water and other ‘ecosystem services’ that ultimately depend on biodiversity. For most other types of tourism, biodiversity contributes significantly to the attractiveness and quality of destinations, and therefore to their competitiveness: for example, coastal water quality and natural vegetation are both ecosystem services that contribute to destination attractiveness. And biodiversity is a direct attraction at the heart of nature-based tourism products – such as wildlife watching, scuba diving or tourism in protected areas.



However, biodiversity is under pressure worldwide and has suffered severe losses as more land is converted for human use from a natural state, and as these human uses become more intensive. In 2005, the UN’s Millennium Ecosystem Assessment concluded that human activities threatened the Earth’s ability to sustain future generations.

Clearance of land for tourism developments has contributed to these losses, particularly in coastal and mountain areas. Inappropriately sited developments have damaged natural coastal defences, making coastal areas more prone to storm damage; or have damaged mountain vegetation and soils, making them more liable to erosion and increasing flooding risks. The physical pressure from the many visitors who are interested in and want to visit sites with rich biodiversity but fragile environments, has also created problems. For example, coral reefs are easily damaged at heavily used scuba diving sites, and the effects of trampling by visitors can change and, eventually, destroy vegetation in mountain areas.

According to current estimates, 60% of the world's land surface is now managed in some way for human use.¹ The loss of biodiversity that has accompanied this intensification of human use of the environment, is measured in the loss of key ecosystems, such as forests, wetlands or coral reefs, and in the growing number of species that are threatened with extinction or which have already become extinct. The rate of species extinction today is reported to be up to 1,000 times greater than the natural rate and ecosystems are functioning less effectively.²

Loss of biodiversity is now recognised as a major problem internationally. Healthy ecosystems carry out vital functions – termed 'ecosystem services' – that support life on Earth (box 1). Loss of these ecosystems and of the species they contain, destroys their support functions. For example, natural forests and vegetation act as natural stores of water in watersheds. Destroying these forests leads to increased risk of flooding, erosion and drought as the natural water storage function they perform is lost. Or in the oceans, overfishing in many areas has caused serious declines in fish stocks and has reduced their ability to provide food.

Box 1 Ecosystem services

Healthy ecosystems provide us with ecosystem services. The Economics of Ecosystems and Biodiversity (TEEB) defines ecosystem services as "the direct and indirect contributions of ecosystems to human well-being", and divides them into four main categories:

- Provisioning services – these include supplying food, freshwater and raw materials, such as fiber, timber and fuel wood.
- Regulating services – these include maintenance of soil fertility, pollination of crops by insects, regulation of water flow, prevention of erosion and climate control.
- Habitat services – these maintain genetic diversity amongst species and support species life-cycles.
- Cultural services – these are non-material benefits that include recreation and tourism, education and spiritual experiences.

In addition, these services all depend on supporting services, such as the global water and nutrient cycles, which are fundamental to ecosystem functioning and to life on Earth. These services are vital for tourism; but at the same time, tourism development and activities can adversely affect ecosystems and their ability to provide these services.

The typology of ecosystem services used in the TEEB, along with the supporting services identified in the Millennium Ecosystem Assessment, is shown in annex 1.

In these, and many other examples, biodiversity loss has severe economic consequences due to the costs of the resulting damage: such as a decline in yields from fisheries, or a decline in tourism as a destination becomes less attractive for visitors. Even where there may be technological ways to repair the damage, these are generally far more expensive and less effective than the costs of protecting biodiversity in the first place; and in many cases, technological solutions are either not available or impractical on the scale of response necessary.

Because ecosystem services and biodiversity are vital for tourism, it makes sense for destinations and the tourism sector to protect them as valuable assets that contribute to the long-term success of tourism; furthermore, tourism can provide a positive stimulus for conservation when biodiversity is an important attraction. While this is recognised by many in the tourism sector and in public bodies with responsibilities for tourism, protection of biodiversity and ecosystem services is a shared responsibility that requires coordinated action within the tourism sector and between tourism and other sectors – including government, civil society and NGOs. In particular, this needs to be based on clear frameworks for action, such as national sustainable tourism plans and national biodiversity strategies.

1 United Nations Environment Programme (2010), *Are You a Green Leader? Business and Biodiversity: Making the Case for a Lasting Solution*, UNEP, Paris.

2 Ibid.

1.2 The UN Responses to Biodiversity Challenges

The need for action to reverse the decline in biodiversity is recognised in a range of global agreements and initiatives. These include the Convention on Biological Diversity (CBD) and other multilateral environmental agreements, the 2010 Biodiversity Target, the Millennium Ecosystem Assessment (MA), the Millennium Development Goals (MDGs), the UNEP-led study into The Economics of Ecosystems and Biodiversity (TEEB), and the recently established International Science Policy Platform on Biodiversity and Ecosystem Services (IPBES). These agreements and initiatives raise awareness about the issues and provide guidance and frameworks for practical action to protect and restore ecosystem services and biodiversity. In particular, these highlight the importance of measuring and integrating the economic value of biodiversity into policies, planning and decision-making, and of managing biodiversity resources sustainably, so they maintain and enhance ecosystem services. Their guidance and frameworks are as relevant to tourism as to other sectors. The CBD has also produced specific Guidelines on Biodiversity and Tourism Development.



To help reverse the decline in biodiversity, the challenges for the tourism sector and those in government with responsibilities for tourism are:

- applying existing guidance, frameworks and best practices on biodiversity and ecosystems services, to tourism;
- understanding the negative impacts that tourism has on biodiversity and the ways in which these impacts can be avoided or minimised;
- understanding the value of biodiversity for tourism, and the potential for tourism to make a positive contribution to biodiversity conservation; and
- integrating biodiversity considerations into planning and decision-making relating to tourism.

UNWTO has long recognized biodiversity as an important issue. UNWTO and the Secretariat of the Convention on Biological Diversity have been collaborating since the International Year on Ecotourism in 2002. In 2006, UNWTO established the Consulting Unit on Tourism and Biodiversity (box 2). UNWTO will participate in the tenth meeting of the Conference of the Parties (COP 10) to the CBD in Nagoya, Japan in October 2010, to raise awareness of the importance of biodiversity for the sustainable development of tourism. To highlight these links, and to coincide with the UN International Year of Biodiversity, “Tourism and Biodiversity” has been selected as the theme for World Tourism Day 2010.

Box 2 UNWTO Consulting Unit on Tourism and Biodiversity

In 2006, UNWTO, with the support of the Federal Government of Germany established the Consulting Unit on Tourism and Biodiversity for Tsunami Affected Countries, based in the UN premises in Bonn, Germany. The initial goal of this Unit was to provide expertise and advisory support to national and local governments of the countries hit by the tsunami in 2004 (in order to assist in redeveloping their tourist infrastructure). In January 2010, the German Government agreed to continue this cooperation by establishing the UNWTO Unit on Tourism and Biodiversity in a special funding agreement till the end of 2011. The mandate of the Unit has been widened to offer advising services to UNWTO members on issues of tourism and biodiversity upon their request, under the overall guidance and supervision from the UNWTO Secretariat.

The main tasks of the UNWTO Consulting Unit are:

- to provide support to UNWTO Member States on biodiversity-based sustainable tourism, participatory tourism planning, and connecting biodiversity-based tourism to overall economic development;
- to support the development of biodiversity-related sustainable tourism products by local stakeholders;
- to assist UNWTO Member States in finding new funding opportunities for biodiversity-related tourism development projects;
- to highlight the linkages of biodiversity and tourism;
- to raise awareness on the role of biodiversity in adaptation of tourism to climate change;
- to apply the *Guidelines on Biodiversity and Tourism Development* of the Convention on Biological Diversity (CBD) for planning processes in tourism destinations, and demonstrate how this approach can be applied by destinations for management of tourism and biodiversity;
- to develop management, communication and participation tools, as well as training and capacity building for enabling local people to participate in and benefit from tourism projects related to biodiversity;
- to contribute to the formulation and implementation of UNWTO's activities for the post-2010 biodiversity targets of the Convention on Biological Diversity.

UNWTO is also contributing to the UN inter-agency Environmental Management Group (EMG) report on advancing the biodiversity agenda within the UN system, which also links with preparation of the CBD's Strategic Plan for 2011-2020. The EMG report is contributing to formulation of the post 2010 biodiversity targets and aims to provide information about the interactions of other policy sectors of the UN system with biodiversity; to create awareness in the UN system about the CBD process; and to identify how collaboration in the UN system can be furthered in support of the advancement of the biodiversity agenda. The EMG report is being submitted to the United Nations General Assembly at its tenth special session in September 2010, and to the tenth meeting of the Conference of the Parties to the CBD.

In addition, as part of the UN's Green Economy Initiative, UNWTO, jointly with the UN Environment Programme, is producing a chapter and a series of background papers to show how investment in sustainable tourism solutions can contribute to sustainable development and a green economy. UNWTO's "Roadmap for Recovery", which has been developed to guide governments and the tourism sector in responding to the economic crisis, also highlights the role of the green economy and responding effectively to climate change in the future of travel and tourism.

1.3 Global Initiatives on Tourism and Biodiversity

The tourism sector is already acting to reduce impacts on biodiversity and to support conservation. For example, some tourism businesses have set up funds to support conservation projects and others encourage tourists to make voluntary donations to conservation organisations in the areas they visit. Implementation of sustainable tourism practices is helping to reduce pressures on biodiversity, particularly, by reducing waste generation and improving waste handling and management; by promoting more sustainable use of natural resources, for example through sourcing of food in tourism supply chains; and by managing tourism activities to minimise disturbance to plants, animals and their habitats. Tourism businesses can take many simple actions to help protect biodiversity: The Tour Operators' Initiative for Sustainable Tourism Development (TOI) – whose secretariat is hosted by the UNWTO in Madrid, Spain – in association with UNEP, UNESCO and UNWTO, and various NGOs, has produced guidance on managing tourism in sensitive areas, including deserts, mountains, and the marine environment, and IUCN and Accor have collaborated to produce “Biodiversity: My hotel in action”, a guide on biodiversity actions for the accommodation sector.

Some tourism businesses are making important contributions by establishing commercial operations that are directly linked to conservation: one example is the large number of commercial game and conservation reserves that have been established for tourism in southern Africa. Some others have developed tourism products that are specifically designed to support conservation, for example, by providing a share of income to specific conservation projects, and by maintaining a flow of tourists, and therefore income, to areas where income from tourism is a vital source of funding for conservation.



Actions on tourism and biodiversity are also being supported by NGOs and international organisations. The United Nations Foundation, Rainforest Alliance, UNEP, and the UNWTO have led a coalition of over 40 organizations to develop the Global Sustainable Tourism Criteria, which includes biodiversity. The Global Sustainable Tourism Council has been set up to support implementation of the criteria. IUCN has developed various guidance materials on tourism and biodiversity, including Guidelines for Tourism in Parks and Protected Areas, published in 2001 in association with UNEP and UNWTO. UNWTO and the UNESCO World Heritage Centre are jointly working to enhance sustainable tourism management in World Heritage Sites. NGOs including Conservation International, The Nature Conservancy and WWF, and development agencies such as SNV, GTZ, USAID and the World Bank are involved in biodiversity and tourism projects.