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# UNESCO World Heritage Sustainable Tourism Online Toolkit

## Guide 8 Managing visitor behaviour



# Welcome to the UNESCO World Heritage Sustainable Tourism Toolkit

Sustainable planning and management of tourism is one of the most pressing challenges concerning the future of the World Heritage Convention today and is the focus of the UNESCO World Heritage and Sustainable Tourism Programme.

These 'How To' guides for World Heritage Site managers and other key stakeholders will enable a growing number of World Heritage Site communities to make positive changes to the way they pro-actively manage tourism.

## How to use this guide

These easily accessible 'How To' guides are focused on best practice approaches to sustainable economic development through tourism. The first of their kind, the 'How To' resources offer direction and guidance to managers of World Heritage tourism destinations and other stakeholders to help identify the most suitable solutions for circumstances in their local environments and aid in developing general know-how for the management of each destination.

The 'How To' guides bring best practice knowledge to the full WH community, so that site managers, tourism professionals, conservation professionals, and communities around the world understand the possibilities of sustainable tourism and what key issues have already been achieved.

These resources are a valuable asset to site managers in particular, who often lack the tools and know-how to effectively manage and maximise tourism benefits, while minimising its negative impacts.

Our series of guides have been structured as a step-by-step process for site managers.

Guides 1-4 establish the basic foundations for sustainable tourism (these are coloured yellow).

Guides 5-10 are tailored to more specific issues, which will have greater relevance at some sites than at others (these are coloured orange). We recommend that site managers explore each guide, however, as sustainable tourism is a holistic process, addressing all issues in a strategic manner.

### Strategic Foundations

Guide 1  
Understanding



Guide 2  
Strategy



Guide 3  
Governance



Guide 4  
Engagement

### Core Delivery (Only works if steps 1 to 4 are undertaken)

Guide 5  
Communication



Guide 6  
Infrastructure



Guide 7  
Value



Guide 8  
Behaviour



Guide 9  
Investment



Guide 10  
Monitoring

## Our Objective

The goal is to stimulate local solutions in communities through capacity-building in best practice. With the immense scale and variation of World Heritage Properties around the globe, coupled with scarce human and financial resources, this is now more important than ever. Site managers and other stakeholders in the tourism sector must have access to these types of innovative sustainability tools in order to develop and formulate their own successful results.

Ideally, site managers and other users will begin to navigate through this system by learning basic ideas and guidance. The system then enables the user to delve deeper into any given subject that falls in line with their local interests, needs, and aspirations.

Our objective for these guidance resources is to enable the growth and success of an entire community of World Heritage Properties, making positive changes to their local surroundings and pro-actively managing tourism in their areas. In parallel, by establishing this community, we aim to facilitate knowledge exchange of the most progressive ideas, and encourage their implementation and evolution.

The driving ethic for the 'How To' guides is to explain critically important ideas for sustainable tourism in World Heritage sites in a clear and concise manner, conveying the key knowledge and processes in a reading time of under 20 minutes per idea. Our goal is to make implementing the ideas of sustainable tourism easier to understand and put into practice for all parties involved.

## Getting started

We understand the complex range of different societies in which World Heritage sites exist, and the many challenges site managers face on a daily basis. While the intention is to encourage each site to undertake most, or at least many, of the tasks included in the guides, considering them together all at once may seem daunting and even impossible.

We have developed this tool as a source of guidance and inspiration. It is a menu of ideas from which you, the user, may choose to put into practice, helping your World Heritage site become more sustainable for its current and future visitors.

Getting to know these 'How To' guides will move your site towards better self-management and sustainability rather than demand a level of sophistication that might simply be unattainable for some World Heritage sites. We would urge all site managers to read through these resources thoroughly and begin to think about what positive steps can be taken to implement these changes. Again, we remind each user that results will differ for each site, and the circumstances of the local environment and community must always be taken into consideration.

Sustainability is a complex system to navigate. Please feel free to ask any questions regarding the information provided in the 'How To' guides, or send us your feedback. We are here to help.

## Guide 8 Managing visitor behaviour

This guide will tell you why there is a need to manage visitor movements and behaviour, and how you may start to develop a visitor management system.

### Why this matters

Managing visitor movements and influencing visitor behaviour are critical aspects of developing sustainable tourism. Not only is it often crucial to protecting the values and attributes of the World Heritage site, but it is also a contributing factor to a high quality visitor experience.

**By managing visitor flows, you can minimise the negative effects on the host community and maximise the opportunities for them to benefit.**

**There is a common misconception that visitor movements are beyond control**, that they are simply a force of nature, but this is not the case. **Great destinations manage where visitors go**, when they go there, and what they do there. This is not about controlling or spoiling the visitors' experiences. In fact, it is exactly the opposite. Visitor management ensures that guests of the destination – now and in the future – can experience unspoiled and well-thought through attractions at well-preserved heritage sites.

**“Managing visitor movements and influencing visitor behaviour are critical aspects of developing sustainable tourism. Not only is it often crucial to protecting the values and attributes of the World Heritage site, but it is also a contributing factor to a high quality visitor experience.”**

### 1. You cannot manage visitor behaviour unless you measure key variables first

**Do your research** – effective visitor management is basically impossible without some good analysis of the tourism that takes place. Most destinations and heritage sites are seasonal, so **you need to identify when too many people may crowd** the attractions, spoil the visitor experience, and damage the World Heritage site. Guide 1 (Understanding Tourism) should have helped you to identify the current and future demand for your destination. **To manage visitor flows you need to be able to anticipate tourism demand based on past experiences.** You cannot guess or estimate this. **You must absolutely collect data** to make demand forecasting effective. You also must be able to identify the time and physical spaces where the issues are arising and the key risks to the heritage.

#### 1) Wider trends

Every destination is different, but **being aware of the long-term and short-term trends** with regard to visitor numbers and pressures is crucial. A destination that is subject to 20% growth per year in visitor numbers will need to develop visitor management systems appropriate for the pressures that are coming, as well as those that already exist. **Forward forecasting** – for example 5-10 years in advance – **is critical.**

#### 2) Seasonality

Most destinations are subject to peak season pressures. In other words, the **negative impacts and risks are not spread evenly across the year**, and **you need to identify the seasonal peaks and troughs.** Visitor management systems must kick in and shape visitor movements and behaviours specifically during that period; in less busy periods it may not be necessary.

#### 3) Monthly and daily analysis

The **patterns of leisure time hours** for any given society **have a major impact** on the pressures at World Heritage sites. In some countries, weekends are often the days that have the greatest visitor numbers, so it may be wise to **identify this time period in advance and develop systems** for managing visitor movements and behaviours on those peak days.

#### 4) Public holidays and special days

In many societies, the **greatest pressures will come on a handful of public or religious holidays**, special days, or festivals, especially if the World Heritage site in question has a spiritual significance. Again, visitor management should **identify and focus on these days** in advance and develop an appropriate system of management.

#### 5) Time of the day

It is vital to have some understanding of the peak periods during the day. **Pressures will vary enormously**, and improving the quality of visitor experience, mitigating pressures, and spreading **benefits for the local community can often all be improved by spacing out** visitor groups throughout the day.

## 2. Some ways to gather this information

#### Ticket sales data

Some sites will simply be able to look at the data on ticket sales for the whole site or for key attractions to form an overview of visitor flows over the year, specific months, weeks, or days.

#### Accommodation stock data

Some destinations will have accurate tourism data that reveal the densities of visitors at any point in the year.

#### Observation

Working out when and where the issues are found at your site is not always high-tech and expensive. Sometimes simple observation of the issues can reveal a great deal of value.

#### Surveying key people

Many sites overlook the expertise and observational skills of the people already on the ground. A simple survey that asks hoteliers, restaurateurs, conservationists, taxi drivers, guides, the host communities, and retailers when they experience peak periods can reveal a great deal about visitor movements.

#### Enabling people to register their concerns in a low-tech way

For example, texting a number when they experience unacceptable impacts can also be valuable.

## 3. Think carefully about the destination's 'carrying capacity' or 'carrying capacity range' and the variables that affect its ability to accommodate people

**Nothing in this guidance should be read as encouraging sites to attract tourism if this is not in the interest of the World Heritage site or the host community. Some heritage is so sensitive to the impacts of visitors that it needs to be entirely protected** and made accessible in other ways than physically experiencing the site (e.g. Altamira in Spain). **Some World Heritage sites are working on models of 'remote access'**, with visitor centres at an appropriate distance from the site, or at an accessible location even further away. Given the emergence of new technologies, many sites should be looking at different ways for people to access, learn about, and experience their sites and OUV without actually needing to visit.

**The idea of a single number identifying** how many visitors a site can accommodate – its 'carrying capacity' – **is problematic**. Recent research has suggested that a better way to think about 'carrying capacity' is to **look at the constraints upon numbers and the variables** that are likely to make anything beyond a certain number of visitors unsustainable and socially, ecologically, economically, or culturally damaging.

**This is unlikely to be one simple number**; it is more likely to be a range variable to different times. **For example**, in the dry season a destination may have acute water resource concerns if more than 'xx' visitors are at the resort, but this might not be a problem in the wet season. At different times and in different contexts there will be – without good visitor management – too many visitors in the wrong places. This will result in negative impacts on the heritage, a reduction in the quality of local life, as well as a poorer visitor experience at the destination. **If you have good data on tourism pressures across time and physical spaces, then you can have a plan and a system that kicks in** when it needs it is necessary, rather than trying to manage costly, constant interventions that may not be required or can be avoided all together.

The number of people a destination or site can accommodate sustainably can be increased if they are managed more effectively with better and more sustainable facilities. One of the leading authorities on this subject, Kiran Consulting, has suggested a new term for destinations – a 'Carrying Plan' – which involves the process of identifying how many visitors the destination can handle, and how to manage the destination differently when that number is exceeded.

## 4. Develop a Carrying Capacity Plan and approach

If you are a well resourced destination or heritage site, then you may be able to commission a specialist's technical guidance for this task (it can be complex and requires computer modelling of a range of variables). **Some World Heritage sites have invested in guidance to develop their Carrying Plan and have developed new infrastructure** to manage visitor flows more effectively. The most sophisticated computerised systems change visitor flows and dwell times as key variables change in real time. This might mean that guides take groups of visitors on a different route to see a different site to ease congestion at 'honeypot' sites, or that access to a sensitive area of the site is restricted when footfall reaches a certain level. Often **such specialist guidance helps a destination to manage access to sensitive elements of the site** – by developing new interpretation facilities before or after the sensitive elements to minimise dwell time at the most vulnerable points.

If you have very limited resources then you need to learn from the best examples and implement low-tech, low cost solutions. For instance, if your research tells you that national holidays are the most densely crowded days, then you can develop a system for those days that:

Channels visitors across a wider area of the destination

Restricts access to sensitive areas

Raises prices for some areas of concern

Limits them to timed tickets

There are a number of visitor management techniques that do not need to cost a great deal of money, but they do require you to clearly identify the timing and intensity of the issues, as well as where such special systems need to be implemented.

**Remember, the destination is usually bigger than the World Heritage site** – utilise the wider destination to spread both positive and negative impacts. Visitors will not be aware of the boundaries of the World Heritage site and tend to experience the whole place, so **put non-essential activities elsewhere in the destination**, rather than in the boundaries of the World Heritage site.

## 5. Some methods to consider using for managing visitors

### 1) Limit visitor access

The crudest way to protect heritage from visitor impacts is to block access or severely limit it. **Visitors do not have a 'right' to see a site** if it simply cannot sustain the impacts of the visitation. If only a set number of people can access the site each hour or day, then **make this clear** through your interpretation and presentation of the site.

### 2) Spread visitors spatially and across time to minimise the intensity of negative impacts

You cannot let more and more visitors into delicate ecological or cultural settings without something going wrong, but **you can ease the pressures by spreading tourism** more evenly across the destination, by broadening the visitor offer and experiences, or by encouraging visitors to arrive at less pressured moments in the day, week, month, or year.

### 3) Advance ticketing systems

Some World Heritage sites now have ticket-only access. **This kind of system enables a site to release only enough tickets** for any given day. It also means they can offer a high quality visitor experience and protect the heritage from pressures. **Tourism businesses may fear** such measures as being perceived by visitors as a negative control, **but the effect will be the opposite**. Visitors will actually perceive the destination as more special, more authentic, and more unique. Some destinations will become a 'once-in-a-lifetime' destination, with visitors applying for tickets years in advance. Altamira in Spain and Perto-Princesa Underground River Park in the Philippines are two instances where limiting entry has already proved to be very successful.

### 4) Congestion-related pricing systems

People often depend on incentives, and in many cases, **raising the ticket price for sensitive areas** of the site on peak congestion days will engineer a reduction in congestion. However, be warned that some unique experiences are perceived as more desirable if they cost more, and the desired effect could also be lost. **Pricing can be a useful way** to incentivise visitors to spread more evenly throughout the day or week. **By offering much cheaper tickets for quiet periods** and more expensive ones for peak periods, you can engineer a more even visitor flow and relieve the extreme peak pressures. **Also communicate these concerns to visitors**, as some will prefer to visit at less busy times anyway, especially if it helps to conserve the site.

## 5) Spreading visitors across the destination

The **negative effects of tourism tend to be concentrated** in specific places within the destination at the 'must see' aspects of the site. Great sites can avoid this by creating narratives and flows that channel visitors through a range of experiences and spaces, slowing their flow and increasing dwell time in non-vulnerable areas. **For example**, people viewing a sensitive element of the site can spend just a short time there if they are able to learn about it before or afterwards. **They do not need all the interpretation in the immediate vicinity.** It is also possible to widen the range of 'must-see' things through clever interpretation and storytelling. **Telling a wider story of the host community** and their culture, as well as the OUV **also helps** this.

## 6) Offer visitors other experiences, products, and services to lessen the urgency and focus on a small number of 'must see' elements

It is an important objective to **increase visitor dwell-time where it does the least damage**, and minimise dwell-time where it does the most. **Broaden tourist scope** by drawing their attention to lesser-known and less vulnerable areas of your destination.

## 6. Give people the information they need to make good choices

**Give visitors** and tourism operators **the real-time information they need** to make good choices. Many visitors to a World Heritage site will already understand its susceptibility to damage or tourism pressures and will intend to act responsibly. Congestion or the other **negative impacts of tourism can be communicated** to visitors who are **queuing or also at strategic points** throughout their route. Many visitors will increase their dwell-time in less sensitive areas of the destination – shopping, eating, resting, learning, or simply taking in the ambience of the place – if they realise that pressing on regardless to the 'must see' element will create problems. **Little things**, such as having notices to tell people how long a queue will take to navigate, **help enormously.** You can simply write on the ground 'From here, this queue will take around 45 minutes. Why not go for coffee or explore X, Y, and Z?'

**Develop a system for guides** and other actors in tourism to make them aware of issues and solutions. **People create problems, but people can also solve them** if they have assistance and the resources to do so. If you can **communicate to hotel receptionists**, guides, taxi drivers, and others in the destination that on certain moments visitors should not be encouraged to rush to the 'must see' areas of the destination, in turn, **these people can guide visitors to make different choices.** For instance, they can suggest spending more time on a good meal, shopping, resting, seeing something else, etc.

## 7. Increase dwell time where local businesses can secure benefit from visitors

**Visitor flows can be designed so that the local community can secure the benefits.** Some great sites have made visiting a local community to buy products, services, or experiences a key part of the visitor experience. This can often have the added advantage of taking place in a less sensitive location. **People do not have to be sold things in the most vulnerable areas** – retail can be offered outside the sensitive zones to increase dwell-time there.

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## Guide 8 Case study

### Wadi Al-Hitan (Egypt)

#### Baseline situation

Wadi Al-Hitan – also known as Whale Valley – is located in the Western Desert of Egypt. It is an ‘open-air museum’ of invaluable fossil remains of the earliest, and now extinct, suborder of whales (Archaeoceti), as well as other prehistoric fossil remains and diverse living wildlife. **The sheer number, concentration, quality, and accessibility of the evidence saw Wadi Al-Hitan inscribed on the World Heritage List in 2005.** It is state-owned and has strong legal protection under the Egyptian Law for Nature Protectorate Reserves, forbidding actions that would lead to the destruction or deterioration of the natural environment.

**The main visitor groups are foreign tourists who usually camp overnight** at the World Heritage site, which is difficult to reach. **Since the implementation of sustainable tourism strategies** at Wadi El-Rayan Protected Area (WRPA), of which Wadi Al-Hitan is incorporated, **tourist numbers have steadily increased** – around 12,000 visitors were recorded in 2008.

#### What did they do?

**The means through which visitors could access the site were restricted to allow better control over visitor numbers.** Vehicles are prohibited, and Wadi Al-Hitan can only be visited through prearranged guided tours along a set trail, either by foot or on camel. Zoning across the WRPA leads to controlled eco-tourism in some areas, while maintaining others for research and study; and **the well-designed visitor facilities guide people to the key sites via footpaths and provide limited on-site accommodation.**

#### Strategic priorities

Preserve the integrity and natural beauty of Wadi Al-Hitan.

Enable the continuation of scientific research on the prehistoric remains.

Establish a system of sustainable tourism that benefits both the needs of such a fragile site and those of the local community.





## What worked?

The primary concern is safeguarding the highly delicate fossil remains, and this has been achieved through restricting visitor access. **Under the Management Plan (2008-2013) developed for the World Heritage site, this property is identified as a 'World Heritage Zone'.** No vehicle access is permitted, and zoning of the property provides for controlled eco-tourism in some areas, while maintaining others for research and study. **All visits must be prearranged** so that the maximum number of visitors allowed to access the site at any one time is not exceeded. Due to the remote nature of the site, **tourists can camp overnight, which reduces the need for permanent built infrastructure** that would infringe on the natural and prehistoric landscape of Wadi Al-Hitan.

The buffer zone is also managed as a part of the World Heritage Zone within the WHPA. **Effective and well-designed visitor facilities guide visitors to key localities via footpaths.** Through ensuring that each visiting group is accompanied by an allocated trek guide, the actions of visitors can be monitored and any negative impact on the site minimised. Access points to the site have also been reduced and **the perimeter of the World Heritage site is under surveillance to minimise the opportunity for unauthorised visitors.**

In addition to the visitor management strategies, Wadi Al-Hitan incorporates the local communities, businesses and other stakeholders in managing the area; promoting Wadi Al-Hitan as a leading site for non-intrusive eco-tourism and environmental education, as well as making sure that the conservation and development of the site is financially sustainable. **In 2014 Wadi Al-Hitan attracted fundraising from Italy to install solar panels,** which demonstrates how a successfully run World Heritage site can attract financial help to further the goals of the site.

## What was tough?

**Wadi Al-Hitan covers an area of approximately 200km<sup>2</sup> (not including buffer zone),** so securing the area from unwanted visitors, for example, illicit trafficking of fossils or conducting of unauthorised excavation, was a key challenge. **There was a lack of immediate funding,** and no financial assistance from the private sector to help develop the infrastructure or provide the staff training that was needed to make a change. **Prior to Wadi Al-Hitan's inscription on the World Heritage List, there was also no policy to limit tourist access** or restrict numbers and vehicular access.

## How did they get buy-in?

The new restrictions to Wadi Al-Hitan and the requirement that all tours are accompanied by a guide **opened up opportunities for developing new businesses and ongoing employment** for local communities and residents.

## What are the results?

**Improved conservation, increased perception of the value, and community development are the three factors identified by the International Union for Conservation of Nature (IUCN)** as positive impacts from current management strategies and tourism at Wadi Al-Hitan. Restricting tourist numbers has meant that built infrastructure can be kept to the bare minimum, reducing any potential impacts. Implementing guided tours and operating extensive surveillance to limit unauthorised access has also reduced any negative impact (damage or theft) on the fragile fossil remains spread across the World Heritage site.

**As well as strict visitor management, community involvement is promoted at Wadi Al-Hitan** – the tourist trade has been developed at a small scale with local entrepreneurs. **Capacity building around tourism and awareness-raising about the site were some of the key priorities** for local communities, and these have had positive effects in improving local understanding and financial benefits for local businesses.

## What lessons can others take from this?

**Fragile heritage requires special measures to conserve it,** reduce any negative impact, and preserve the OUV. For the majority of World Heritage sites, this will require putting into place measures that restrict visitor access, such as set tour routes or visitors pre-booking excursions.

**Wadi Al-Hitan has extensive archaeological remains, some of which are still undiscovered and undocumented,** so special measures have been taken to ensure that these unexcavated remains are protected and subject to minimal tourist impact or unauthorised intrusion (zoning: 'tourist routes' and 'inaccessible zones'). **Such courses of action require man power and the commitment of local residents and tour guides** – it is important to ensure that the strategy to limit tourist impact does not also negatively affect local communities, and that an incentive (ideally financial) exists to ensure the 'buy-in' of stakeholders.

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To read the complete toolkit visit  
[whc.unesco.org/en/tourismtoolkit](http://whc.unesco.org/en/tourismtoolkit)



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