

### Baa Atoll and Hanifaru Bay, Maldives Scientists, tourism operators, and government unite for conservation

The unique shape of Hanifaru Bay concentrates planktonic food, which attracts large numbers of manta rays and whale sharks seasonally

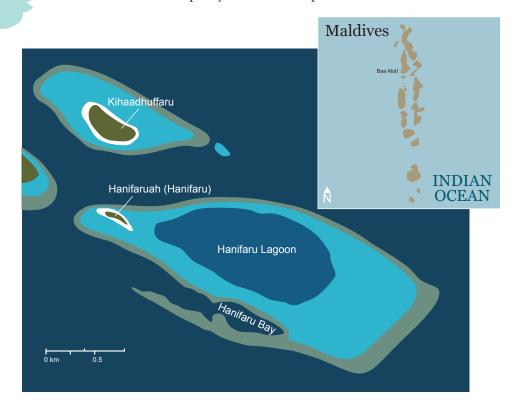
### **History**

Baa Atoll is one of the Republic of Maldives' 26 geographical atolls. Covering an area of 1,200 km², the atoll contains some of the richest coral reef systems in the world, which support the local communities and a thriving tourism industry. The jewel in the biological crown of Baa Atoll is a tiny bay the size of a football field called Hanifaru Bay. The unique shape of the bay concentrates planktonic food, which attracts large seasonal aggregations of feeding reef manta rays (*Manta alfredi*) and whale sharks (*Rhincodon typus*). A National Geographic Magazine article and subsequent media exposure made this site world famous, attracting large numbers of tourists from across the globe to immerse themselves in the tropical waters amongst a feeding frenzy of these gentle giants.

Data collected by the Manta Trust's Maldivian Manta Ray Project (MMRP), based in Baa Atoll, identified an increase in pressure and threats from unrestricted tourism growth

at Hanifaru Bay. On World Oceans Day - 8th June 2009, the Government of the Maldives declared Hanifaru a Marine Protected Area (MPA), and over the following two years a management plan was created by the Ministry of Environment with assistance from the Manta Trust. The final management plan was approved by the Maldivian central government in 2011 and a year later came into full effect. The MPA regulations include a limit on the number of visitors, set a maximum time to stay in the bay for tourists, and bans on scuba diving and fishing. There are heavy fines in place for breaches to these regulations with enforcement by on-site rangers.

The United Nations Educational, Scientific and Cultural Organisation's (UNESCO) recognises Baa Atoll's "great potential for demonstrating sustainable development throughout the Maldives and the region, while relying on a green economy." In June 2011 at the 40th anniversary of UNESCO's 'Man and the Biosphere Program' in Dresden, Germany, the entirety of Baa Atoll was declared a UNESCO World Biosphere Reserve, with Hanifaru Bay one of the core protected zones. World Biosphere Reserves are places where conservation, research and development successfully interconnect. They integrate biological and cultural diversity, combining core protected areas with zones where sustainable development — and innovative approaches to it — are fostered, tested and developed by locals and enterprises alike.



# A certified guide for every 10 snorkelers in the water

### The experience

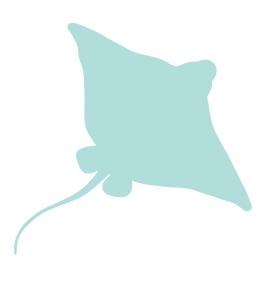
Every year during the Maldives' Southwest Monsoon (May to December), strong currents push planktonic food into Hanifaru Bay where the megafauna's zooplankton prey collects, attracting feeding manta rays and whale sharks. Tourist operators must adhere to strict rules on access times, routes, and mooring locations, while tourists are allowed to snorkel in the bay following clear guidelines on how to interact with the animals. There is a limit to the number of vessels (max=5) and tourists (max=80) allowed in the bay at one time, and each group needs to be guided by a certified Hanifaru

guide (an exam to be taken with the Environmental Protection Agency of the Maldives). Manta rays often feed at the surface, allowing visitors to get very close to the animals without actively approaching them. There are several cleaning stations in the shallow bay, where manta rays are also occasionally seen when they are not busy feeding.





# All of the daily tourist fee goes to the Baa Atoll Conservation Fund

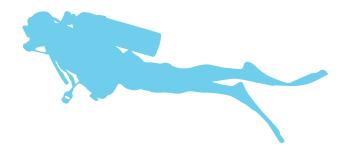


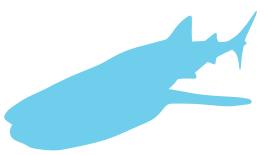
### **MPA** related financing

Hanifaru MPA is one of the Core Zones within Baa Atoll UNESCO Biosphere Reserve. Every tourist visiting the bay to snorkel with the mantas has to pay a fee (\$20 US). All revenue generated from the entrance fee goes to the Baa Atoll Conservation Fund (BACF; www.broffice.gov.mv), which is a separate fund from the central government. There is a BACF committee comprised of nine board members which represent all the stakeholders in the atoll (fishermen, scientist, resorts, councillors, etc.).

A separate committee decides on the scope of the reserve's work and they can apply to the BACF for extra funding for specific projects. However, a core amount of the BACF is set aside to manage the operations of the reserve, such as pay ranger's salaries, reserve officer, ranger boat, fuel, atoll office overheads, etc. The day-to-day running of this work is currently still managed through the Ministry of the Environment.







# Having alternate access days for resorts and liveaboards has caused problems





- i) Patrol and enforcement at Hanifaru Bay: When the management plan initially became implemented, it stipulated that each tourism operator needed to buy tokens (permits) for their guests to enter Hanifaru Bay. The operators bought these in bulk at the start of the manta season, and the money was paid into the BACF. However, no system was in place to check that the rangers were actually patrolling the bay; checking tourist permits and ensuring the guidelines for interaction were followed. This was brought to the attention of the BACF by the operators and the MMRP. Since 2015, rangers have been at Hanifaru Bay almost every day, patrolling and enforcing the requirements of this MPA.
- ii) Alternate access days: EPA guidelines for access to Hanifaru bay stipulate that there should be an alternate day rota for resorts vs liveaboards. This upset some operators as they could not freely access when conditions were right, especially for the liveaboards during the short time they spend in Baa Atoll on their Maldives' excursions. However, this schedule was kept and enforced to manage the number of visitors at Hanifaru Bay while allowing fair access to all parties. Some of the liveaboards now therefore chose not to travel to Baa Atoll, instead they are searching for manta encounters elsewhere. In 2016 however the EPA have said this rule will be relaxed.
- **iii)Advance purchases:** Until 2015, access tokens for Hanifaru had to be purchased in advance at the capitol island of Baa Atoll many miles away. Given the ephemeral nature of the feeding events at Hanifaru this often presented problems for operators who did not have 'spare' tokens in hand should a feeding event occur. This was especially a problem for the liveaboard operators, which may not access the bay on a regular basis. In 2015 however the rangers started to allow the purchase of tokens directly onsite.

#### Replicability of the model

The collection of visitor fees to fund the management of terrestrial and marine protected areas is a "tried and tested" model, but in this case it is supported both by central government, and by the regional Baa Atoll Conservation Fund, which brings together all stakeholders such as fishermen, tourism operators, and scientists in Baa Atoll. This model ensures that Hanifaru Bay MPA is recognised both nationally and internationally, but managed at a local scale to benefit and include the stakeholders most affected by this regulation.

This is an ideal scenario, where funds generated by the visitor fee are put directly towards funding local community projects and paying and training local rangers, thereby providing alternative livelihood opportunities for the community and transparency in the payment scheme. It is hoped the success of Hanifaru can be expanded to include the other Core Protected Areas inside Baa Atoll's Biosphere Reserve, and further afield throughout the Maldives at other key tourism sites.







This factsheet was produced as part of a collaboration between Manta Trust, Project AWARE and WWF to produce a guide to best-practise shark and ray tourism.

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