

Marine World Heritage: the time is now

Protecting the 'best of the best' in the ocean

Fanny Douvere, Coordinator of the World Heritage Marine Programme at the UNESCO World Heritage Centre

Dan Laffoley, Marine Vice-Chair of IUCN-WCPA and Marine Principal Specialist for the Chief Scientist's Team at Natural England

Great Barrier Reef (Australia).

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World Heritage – the very words evoke the global nature of the mission to protect the highest quality and most iconic natural and cultural sites for future generations. There is, however, a major aspect of the implementation of the World Heritage Convention that needs significant strengthening. By far the biggest gap in recognition and coverage by the Convention concerns the ocean. In 2010 this is set to change as the UNESCO World Heritage Marine Programme teams up with the International Union for Conservation of Nature (IUCN) and its marine work through the World Commission on Protected Areas (WCPA) to take on this challenge, hopefully to literally make a world of difference.

With the international agenda becoming ‘greener’ every year, there is a tendency to forget that without the ‘blue’ there simply would not be any green. No life on Earth – not a single thing we value. A glance at a world map shows how strikingly blue the planet really is. The Pacific alone covers about half the world’s surface. The ocean is already valued for the amazing diversity of its life forms. About 300,000 marine species have been described (about 15 per cent of all described species), but estimates suggest

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that over 10 million species still remain to be discovered. The ocean has always been the beating heart of the planet. We are connected to it with every breath of air we take, every drop of water we drink. It provides us with food, transport, energy from winds and waves, but also oil and gas. It regulates the climate in its immense beauty and diversity. Some major steps to protect all this have been taken in the past, but the ocean still needs to be properly reflected in World Heritage work.

The scope of the opportunities to apply the World Heritage Convention to the ocean is immediately apparent. Although the ocean as a whole must be protected, it is clear that some areas are of special value to marine life. Some ocean sites are far richer in biodiversity than others, or they display higher rates of productivity or endemism (the presence of species unique to a particular place). Still others are key areas for spawning and nursing, or serve as migration corridors or stop-over points. Worldwide, an increasing

amount of initiatives taken by governments, non-governmental organizations and other institutions are dedicated to the identification and preservation of such sites. The ‘best of the best’ of these very special ocean places could be (and in some cases already are) recognized and protected through the World Heritage Convention.

Even the briefest analysis shows that the Convention has not yet been applied to anywhere near its real potential in the oceans. In February 2009, a workshop on *Identifying Priorities for Marine World Heritage* was jointly organized by the WCPA and the World Heritage Marine Programme, and hosted by Bahrain. The gathering ended on a highly optimistic note, with strong enthusiasm and the conviction that there is reason for hope. An expanding body of knowledge about the ocean’s special places, and increasingly sophisticated technologies that reveal sites previously hidden from view, are now available to help to identify new marine World Heritage sites. The three-year Tides



Over 10 million birds stop over The Wadden Sea (Germany/Netherlands) every year.

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The Wadden Sea acts as a crucial staging post for many species, providing them with enough food to complete their long journey.

of Time partnership set up by the Swiss watch manufacturer Jaeger-LeCoultre, the *International Herald Tribune* and the World Heritage Centre, together with WCPA's Global Plan of Action, has helped to provide the focus and means to achieve this, and offered new opportunities to scale up and protect marine World Heritage.

Protecting the 'best of the best' in the ocean

Since its inception in 2005, the mission of the World Heritage Marine Programme has been to safeguard the world's most outstanding marine sites, to make sure they will be preserved and allowed to thrive for generations to come. A good start has been made and the programme can now build on this. Over the past five years, proposals developed by States Parties have led to the inscription of seven new World Heritage

sites for their marine values. Among these new biodiversity treasures is The Wadden Sea in the southern North Sea, where over 10 million birds stop over every year on their way from their breeding areas in Siberia, Canada or Scandinavia to their wintering grounds in Western Europe and Africa. The Wadden Sea acts as a crucial staging post for many species, providing them with enough food to complete their long journey. The site is jointly managed by Germany and the Netherlands. In 2005 and 2006 respectively, Panama's Coiba National Park and its Special Zone of Marine Protection, in which 80 per cent of the fish species are unique to the area; and Colombia's Malpelo Fauna and Flora Sanctuary, a site vital for the replenishment of sharks, giant grouper and billfish in the Eastern Tropical Pacific, were inscribed on the World Heritage List. Together with the



Giant grouper in Colombia's Malpelo Fauna and Flora Sanctuary World Heritage site.

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Nazca booby (*Sula granti*) in Malpelo Island (Colombia).

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Hammerhead shark, Cocos Island National Park (Costa Rica).

© Barry Peters

earlier extensions of the Galápagos Islands Marine Reserve (Ecuador) and Cocos Island National Park (Costa Rica), the inscription of Coiba and Malpelo is an essential step towards establishing networks of marine protected areas. Additionally, two new exceptional and extensive marine places, the Phoenix Islands Protected Area (Kiribati)

and Papahānaumokuākea Marine National Monument (United States), have been nominated for inscription, the decision to be taken during the next World Heritage Committee meeting in Brazil in July 2010.

Despite these successes, the World Heritage List still has a long way to go to properly recognize the ocean as widely

and thoroughly as cultural and natural values are recognized on land. First, out of almost 900 existing World Heritage sites, only 41 (less than 5 per cent) are inscribed for their marine values (outstanding biodiversity and/or ecology). Considering that 70 per cent of the Earth's surface is ocean, the discrepancy is obvious. Second,

Inscription of the Coiba National Park and its Special Zone of Marine Protection (Panama) is essential to establish networks of marine protected areas.



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The Hawaiian monk seal, Papahānaumokuākea Marine National Monument (United States).

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the World Heritage Convention calls for a credible, representative, and balanced World Heritage List. Given the lack of sites and the fact that most of the few that are inscribed are in warm water areas, the challenge from this perspective also becomes clear.

Dividing up the ocean



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So how do we go about improving the situation? Reference to terrestrial boundaries (such as continents) or terrestrial ecosystem-type classifications makes little sense when it comes to identifying 'marine gaps' in the World Heritage List. Instead we need to use a framework that reflects the true nature of the ocean and its inhabitants. To support its work, IUCN's World Commission on Protected Areas has pragmatically divided up the ocean into large regions. In this perspective, World Heritage sites are clearly underrepresented in five marine regions, including the Northwest Atlantic, East Africa, Antarctica, North West Pacific, and the Arabian Sea. The 2009 Bahrain workshop concluded that the Arabian Sea in particular holds various marine biodiversity treasures that should be inscribed on the World Heritage List, including vast meadows of seagrass, amazing aggregations of large marine species and spectacular coral reefs.

While regional representation is

important, attention should also be given to a properly balanced approach to different types of marine ecosystem under the Convention. This would ensure that in addition to coral reefs (that form about 25 per cent of all the inscribed marine World Heritage sites) the World Heritage List also reflects the 'best of the best' of other types of marine ecosystem, such as kelp forests, seamounts and rocky reefs. Nations need help to achieve this and there is a clear need for better guidance. To address this concern IUCN is currently developing a thematic study that will provide better advice and help to address major gaps relating to marine World Heritage. The study will lay the scientific foundation for a well-balanced and representative set of marine World Heritage sites that will help to inform choices when nominating or inscribing sites relating to key marine regions or ecosystem types that are over-, under-, or not at all represented. This work is scheduled to begin in 2010 together with



Mangrove lagoons and sand bar in the Belize Barrier Reef Reserve System, inscribed on the World Heritage in Danger List since 2009.

© Jim Praveltz

Inscription on the World Heritage List is only one step towards the safeguard of these outstanding marine places for future generations.

a supporting workshop, with final results being presented to the World Heritage Committee in mid-2011.

The high seas challenge

Increasing coverage and better representation are two key objectives but perhaps the greatest challenge is that the World Heritage Convention has not yet been applied to the high seas. About 64 per cent of the ocean lies in the high seas, a vast area that cannot be claimed by any nation but is the common property of all humanity. While it belongs to all, its proper protection has yet to be achieved, as nations must still agree on how this may best be done. No existing mechanism has the legal power to adequately protect the enormous expanse with its rich biodiversity. Nevertheless, the high seas are home to the great whales, sea turtles, seabirds, tuna and deep-dwelling fishes and invertebrate animals that lead long, slow-motion lives in the eternal dark. Muddy plains, coral-capped seamounts and vents all give rise to unique marine life, found nowhere else on the planet. We already know about some amazing

places on the high seas that are eminently worthy of protection but there is far more to be discovered with many areas as yet unexplored and unmapped.

Some of the known areas are also familiar to the public. In 2008, for the first time, the Marine Conservation Biology Institute (based in Seattle, United States), in cooperation with IUCN-WCPA, identified the top ten treasures of the high seas. The World Heritage Convention would be the legal framework par excellence for ensuring the protection of the most valuable of these gems. Even though the World Heritage Convention does not extend to the high seas, recourse to the internationally recognized methodology currently used to define outstanding universal value could be a first helpful step towards raising awareness. This would also be excellent preparation for the time when effective measures for protection and management begin to take shape. By studying this issue now and by heightening public awareness, we improve chances of preserving fantastic habitats and amazing species of which we are not yet fully aware.

The big picture

Inscription on the World Heritage List is only one step towards the safeguard of these outstanding marine places for future generations. Despite best efforts to date, some of the rare marine World Heritage sites already inscribed face significant challenges when it comes to maintaining their values. Several are subject to threats and various forms of pressure resulting from human activities such as maritime pollution, illegal and unregulated fisheries, mineral extraction and climate change. Such threats put the preservation of the outstanding value of marine sites at risk. Already two such sites, the Belize Barrier Reef Reserve System and Galápagos Islands, are listed as World Heritage in Danger. So how can we deal with these threats and strengthen the capacity of the site managers who are

Ocean in Google Earth

Recent developments such as the WCPA's innovative work with Google in producing 'Ocean in Google Earth' (Google Earth 5.0) allow all existing marine World Heritage sites to be viewed online, as part of the wider network of roughly 4,500 Marine Protected Areas established to date to help to protect the ocean. Through Protect Planet Ocean (www.protectplanetoccean.org) it is now possible to upload pictures, films and stories about these sites for viewing through Google Earth, and to share their wonders with a potential worldwide audience of half a billion people.

confronted with them?

Part of the answer lies in determining where such threats occur and how their cumulative impact affects the preservation of the site. For some sites the biggest impact does not necessarily originate within their boundaries but from human activities adjacent to the site. Other pressures, such as ocean acidification or climate change, are either regional or global in scope, and in many cases they cannot be dealt with effectively at site level. In such semi-enclosed seas as the North Sea (Europe) or the Gulf of Mexico, site-level conservation eventually depends on the quality of management measures taken for the region as a whole.

In order to properly address the threats to the conservation of marine World Heritage sites, we must consider the 'big picture', for example by applying a more ecosystem-based approach to the management of marine World Heritage sites. Such an approach, which is already well established within the marine science community, is also embedded in the World Heritage Centre's strategy for natural heritage. This approach focuses on the functioning and dynamics of the area in its entirety and in the full range of activities affecting it, allowing the level at which management actions will be most effective to be identified. Now that the tools are available to visualize where and how activities affect the conservation of protected areas, such as VMS (vessel monitoring systems) GIS (geographic information systems), GPS (global positioning systems), it is easier, for example, to track illegal fishing or map the migration routes of marine species. Developing the skills that will allow more ecosystem-based management to be applied to marine World Heritage sites is one of the key priorities of the World Heritage Marine Programme in the years to come.

Many obstacles still stand in the way of the expansion of marine World Heritage but the enthusiasm and tools are now coming to the fore, thanks to all the excellent work done to date. It is now time to take a further step and use the Convention to recognize the outstanding variety of habitats and species that live in the ocean and, by doing so, to help protect the blue heart of planet Earth. 🌐



A Galápagos sealion surrounded by Sally lightfoot crabs, Galápagos Islands.

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Tubbataha Reefs Natural Park (Philippines), inscribed on the World Heritage List since 1993.

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Tides of Time

The Jaeger-LeCoultre / *International Herald Tribune* / UNESCO partnership, Tides of Time, is made up of a three-year international advertising campaign promoting a number of marine World Heritage sites and issues affecting them through documented articles and interviews with specialists around the globe. The campaign is run through print and online media via the *International Herald Tribune* on average every month.

Furthermore, additional support provided by Jaeger-LeCoultre serves to fund core work of the World Heritage Marine Programme, as well as regional and national field activities in support of marine conservation throughout the period of the partnership. The financial support has been instrumental in rejuvenating the Marine Programme's strategy and capacity-building initiatives and offers unprecedented possibilities. Jaeger-LeCoultre has also designed a unique watch dedicated to the Tides of Time partnership and organized two auctions, of which the funds were donated entirely to Tubbataha Reefs Natural Park (Philippines) and Sundarbans National Park (India).