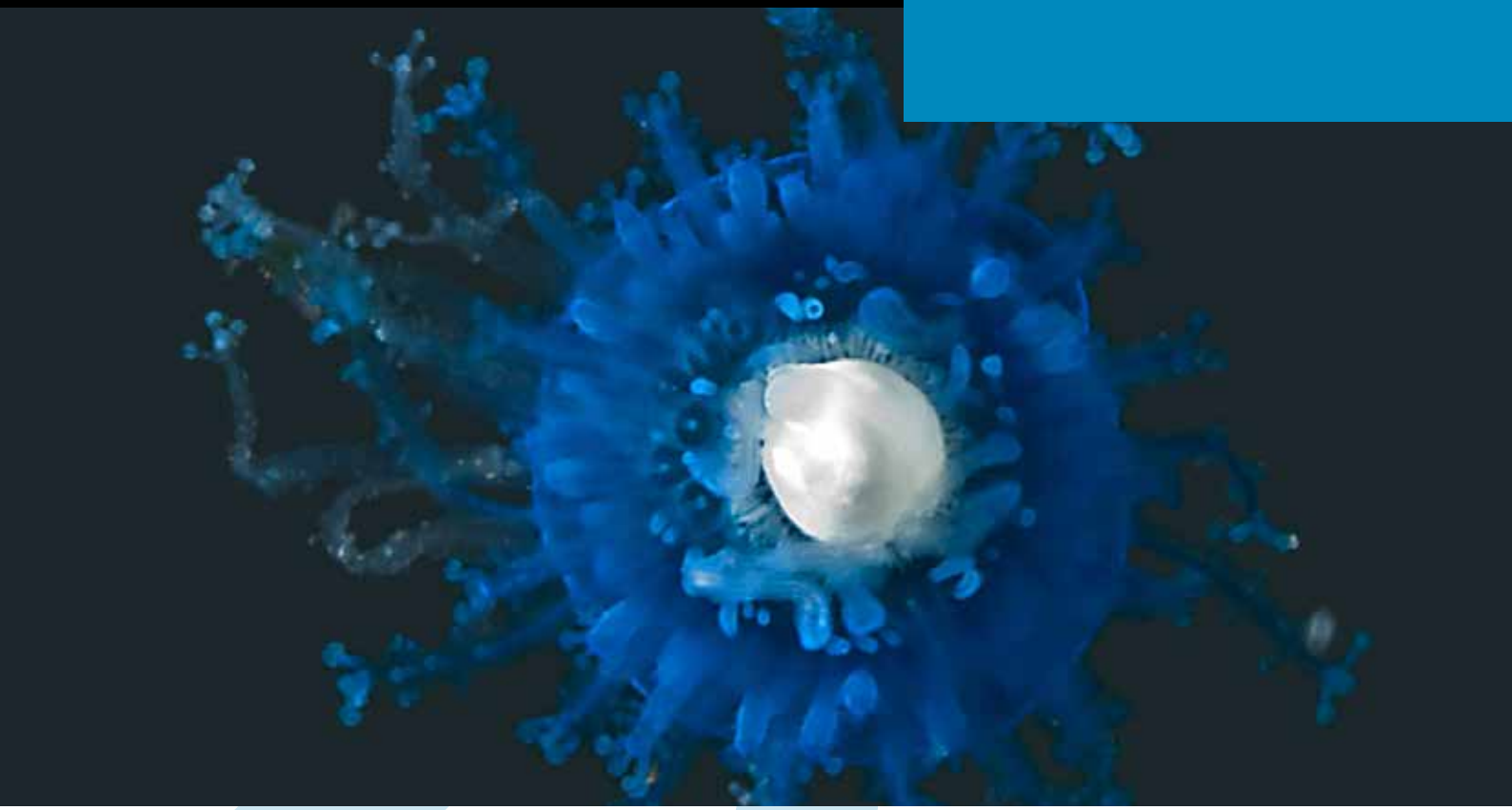
World Heritage reports 44



World Heritage in the High Seas: An Idea Whose Time Has Come

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World Heritage in the High Seas: An Idea Whose Time Has Come

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Foreword

Dr Mechtild Rössler,
Director of the World Heritage Centre.

Just as on land, the deepest and most remote ocean harbours globally unique places that deserve recognition, just as we have given to the Grand Canyon National Park in the United States of America, to the Galápagos Islands in Ecuador or the Serengeti National Park of the United Republic of Tanzania. 70% of our planet is covered with ocean. Nearly two-thirds of the ocean lies beyond the jurisdiction of nations. The open ocean is a vast majestic place that covers half our globe.

Imagine a world with sunken fossilized islands covered in a great diversity of corals and other marine life, giant volcanoes forming vast seamounts that can all but dwarf the tallest mountains on land, a 'floating golden rainforest' on the ocean surface with its own unique creatures, or even a deep dark place with 60-metre-high white spires of rock that looks like a lost city beneath the waves.

Some of these places are not even powered by the light of the sun, like everything else on Earth, but by heat and energy emerging from the Earth and the ocean ridges, that has created some of the most exceptional ecosystems and species – most still unknown to science. Unique forms of life so extreme they form pivotal case studies for space agencies and others, providing critical analogues to help plan future missions to distant planets to search for life or spur innovation for the next generation of disease treatments. All these, and more, are found in the 'High Seas' and the deep seabed – which together we call Marine Areas beyond National Jurisdiction (ABNJ), lying as they do outside the territory of any single nation.

The purpose of this publication is to consider how such exceptional sites could be afforded the same level of recognition and protection that we are currently able to give to natural and cultural sites under the 1972 World Heritage Convention.[1] The reason we do not already do so is largely a result of past history but now is the time to expand our horizons and bring such areas into consideration for their potential Outstanding Universal Value (OUV).

In 1972, when the Convention concerning the Protection of the World Cultural and Natural Heritage was adopted, international environmental law was at a very early stage. The Convention was then, and still is, highly innovative. Its unique and uncompromising vision is set out in the Preamble which states that 'parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the *world heritage of mankind as a whole*.'[2] It highlights the fact that existing international instruments 'demonstrate the importance, for all the peoples of the world, of safeguarding this unique and irreplaceable property, '*to whatever people it may belong*.'[3]

Nothing in this inspirational vision suggests that natural or cultural heritage of OUV which is located in ABNJ should be excluded from this protection. Indeed, under the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the High Seas are waters that are open to all and that may not be subjected to the sovereignty of any state – they are the

1 UNESCO (1972) Convention Concerning the Protection of the World Cultural and Natural Heritage adopted by the General Conference at its 17th session, Paris, 16 November 1972: http://whc.unesco.org/en/conventiontext/

2 Preamble, operative paragraph 6. Francioni has pointed out that it forges an unprecedented link between culture and nature and uses the concept of 'World Heritage' to list sites that are of paramount value to 'mankind as a whole' because of their 'outstanding universal value'. In: Francioni, F. and Lenzerini, F. (eds), 2008, *The 1972 World Heritage Convention: a Commentary,* OUP, pp. 3-4.

3 Preamble, operative paragraph 5.

global commons. It is difficult to imagine that the founders' far-sighted vision of World Heritage protection envisaged a future world where we intentionally or accidentally ended up excluding half the surface of the earth – the open ocean.

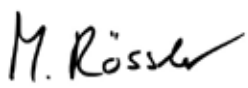
Nevertheless, the practicalities of nominating, assessing and inscribing sites has put the primary obligation on the states within whose territories they are situated. This publication shows that the time has come to remedy this historical oversight. It argues, with some vivid illustrations, that there are many sites of potential OUV in ABNJ. The original vision of the 1972 Convention appears to encompass these sites, but they have been neglected in the development of the procedural means by which inscription and protection takes place.

The United Nations General Assembly (UNGA) is now looking with renewed interest at the importance of the conservation and sustainable use of biodiversity of ABNJ. The World Heritage Convention has protected sites of OUV for over 40 years and has the potential to play a key role in this agenda, identifying sites which are the equivalent of the charismatic sites on land such as the Okavango Delta or the Grand Canyon National Park, although by definition far from land and often deep beneath the ocean.

This publication responds to the independent audit recommendations of the May 2011 *Evaluation of the Global Strategy and the PACT initiative*[4] that States Parties to the Convention should reflect on means to preserve sites that correspond to conditions of OUV which are not dependent upon the sovereignty of States Parties.

This publication has three main parts. Part One looks at the context of this recommendation and discusses how this work contributes to efforts currently being undertaken under the auspices of the 1982 United Nations Convention on the Law of the Sea and the 1992 Convention on Biological Diversity (CBD). Part Two looks at the way in which the concept of OUV could be applied in ABNJ and provides a short illustrative collection of sites in ABNJ of which there is sufficient scientific knowledge to make an informed assessment of their potential OUV. Part Three of this publication then discusses the legal basis under the Convention for such a development and lays out the possible modalities toward World Heritage sites in the High Seas.

The far-sighted vision of the 1972 World Heritage Convention's founders of safeguarding our unique and irreplaceable heritage of humanity, *to whatever people it may belong*, the 2011 audit recommendations that first recognized the need to reflect on OUV in areas beyond national jurisdiction, and in 2016, the beginning of the negotiations of a new agreement for the protection of biodiversity in ABNJ under the 1982 United Nations Convention on the Law of the Sea, all underline that World Heritage in the High Seas is indeed an idea whose time has come.



Dr. Mechtild Rössler
Director of the Division for Heritage and the World Heritage Centre, UNESCO

4 WHC-11/35.COM/INF.9A. Paris, 27 May 2011. http://whc.unesco.org/archive/2011/whc11-35com-9Ae1.pdf

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This publication would not have been possible without the leadership of His Royal Highness Prince Khaled bin Sultan and the generous support of the Khaled bin Sultan Living Oceans Foundation. The initiative also received support from the French Marine Protected Areas Agency (AAMP) and the Nekton Foundation. It is, however, thanks to the enduring support by the Swiss watch manufacture Jaeger-LeCoultre to the World Heritage Marine Programme that innovative and inspiring work such as that reflected in this publication becomes reality.

This publication has benefited considerably from inputs received by participants at the High Seas expert meeting convened at UNESCO Headquarters in Paris on 29-30 October 2015 and extensive consultations with recognized leading experts in the field of policy, legislation, ecology and geology of ABNJ and World Heritage. The annexes include a list of specialists who took part in the technical expert meeting and reviewed, or contributed to, this publication.

Abbreviations

AAMP	Agence des aires marines protégées
ABNJ	Areas beyond National Jurisdiction
BBNJ	Biodiversity beyond National Jurisdiction
BPA	Benthic Protection Area
CBD	Convention on Biological Diversity
CCAD	Central American Commission on Environment and Development
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNRS	Centre national de la recherche scientifique
COCATRAM	Comisión Centroamericana de Transporte Marítimo
CORDIO	Coastal Oceans Research and Development – Indian Ocean
EBSA	Ecologically or Biologically Significant Area
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
FAO	Food and Agriculture Organization of the United Nations
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
IMMA	Important Marine Mammal Area
IOC	Intergovernmental Oceanographic Commission
IODE	International Oceanographic Data and Information Exchange Programme
ISA	International Seabed Authority
ITLOS	International Tribunal for the Law of the Sea
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unreported and Unregulated fishing
IWC	International Whaling Commission
MPA	Marine Protected Area
NASA	National Aeronautics and Space Administration
NERC	Natural Environment Research Council
NIWA	National Institute of Water and Atmospheric Research Ltd
NOAA	National Oceanic and Atmospheric Administration
NSF	National Science Foundation, USA
OSPESCA	Central American Fisheries and Aquaculture Organization
OUV	Outstanding Universal Value
RFMO	Regional Fisheries Management Organization
ROV	Remotely Operated Vehicle
SIODFA	Southern Indian Ocean Deepwater Fishers Association
SPAW	Protocol Concerning Specially Protected Areas and Wildlife
SPRFMO	South Pacific Regional Fisheries Management Organisation
UNCLOS	United Nations Convention on the Law of the Sea
UNGA	United Nations General Assembly
UNICPOLOS	United Nations Informal Consultative Process on the Oceans and the Law of the Sea
VME	Vulnerable Marine Ecosystem

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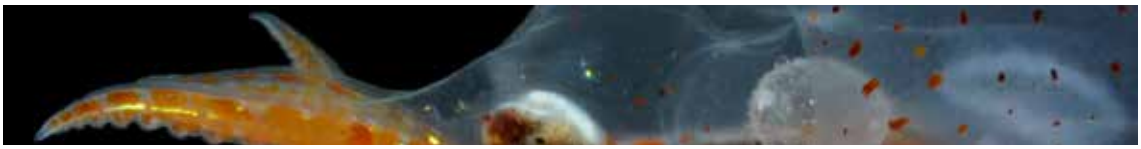


Executive summary

Oceans cover 70% of our planet. Nearly two-thirds of it lies beyond the jurisdiction of nations. These marine areas beyond national jurisdiction (ABNJ) cover half our planet. They contain natural wonders equivalent to those on land such as the Grand Canyon National Park in the United States of America, the Galápagos Islands in Ecuador or the Serengeti National Park of the United Republic of Tanzania. They include sunken fossilized islands covered in a staggering diversity of corals and other marine life, giant volcanoes forming vast seamounts that could only dwarf the tallest mountains on land, a 'floating golden rainforest' on the ocean surface with its own unique creatures, or even a deep dark place with 60-metre-high white spires of rock that looks like a lost city beneath the waves. These unique conditions have also given birth to the most unusual species – many still unknown to science. Unique forms of life so extreme they form pivotal case studies for space agencies and others, providing critical analogues to help plan future missions to distant planets in search for life or spur innovation for the next generation of disease treatments.

Nothing in the inspirational vision contained in the 1972 UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage suggests that natural or cultural heritage of Outstanding Universal Value (OUV) located in areas outside national jurisdiction should be excluded from its protection. In 2011, an independent external audit on the Global Strategy of the 1972 World Heritage Convention recommended that the World Heritage Committee reflect on appropriate means to preserve sites that correspond to conditions of OUV which are not dependent upon the sovereignty of States. Indeed, it is difficult to imagine that the Convention's founders' far-sighted vision of protection envisaged a future world where we intentionally or accidentally ended up excluding half the surface of the Earth – the open ocean.

This publication is a response to the audit recommendation and shows that the time has indeed come to remedy this historical oversight. It argues, with some vivid illustrations, that there are many sites of potential OUV in areas beyond national jurisdiction. The original vision of the 1972 Convention appears to encompass these sites, but they have been neglected in the development of the procedural means by which inscription takes place. This publication takes a systematic approach to illustrating potential OUV in marine ABNJ, mindful that the purpose is not to produce an official tentative list of sites but rather to demonstrate through a small number of illustrations the need for, and the urgency of, extending the provisions of the Convention to the other half of the planet, and to illustrate a sample of the variety of differing types of potential OUV that exist in the open ocean and seabed beyond national jurisdiction.

Further, the publication explores the mechanisms by which the States Parties to the World Heritage Convention could consider implementing changes to allow the inscription and protection of sites in marine ABNJ on the UNESCO World Heritage List. It does not recommend any particular approach but does seek to explore briefly the arguments for and against each, recognizing that not all of these options are equally practicable. In short, there are realistically three possible modalities: 1) Bold interpretation of the Convention, either through incremental change or a formal policy change; 2) Amendment outside the terms of the 1972 Agreement akin to the 1994 Part XI Implementing Agreement to the United Nations Convention on the Law of the Sea (UNCLOS); and 3) An optional protocol to the 1972 Convention, developed through an international negotiation among States Parties, binding only those States that choose to ratify any resulting protocol.

Finally, the publication highlights the fact that in 2016 the United Nations General Assembly (UNGA) started a process leading to the negotiation of a legally binding instrument under UNCLOS on the conservation and sustainable use of biological diversity in ABNJ. This process is separate from discussions within the World Heritage Convention's network but strongly underlines the fact that World Heritage in the High Seas is indeed 'an idea whose time has come'.

1

PART I
Outstanding Universal Value in the High Seas: why does it matter?

The pelagic bolitaenid octopus *Japatella diaphana*

1. What are the 'High Seas'?

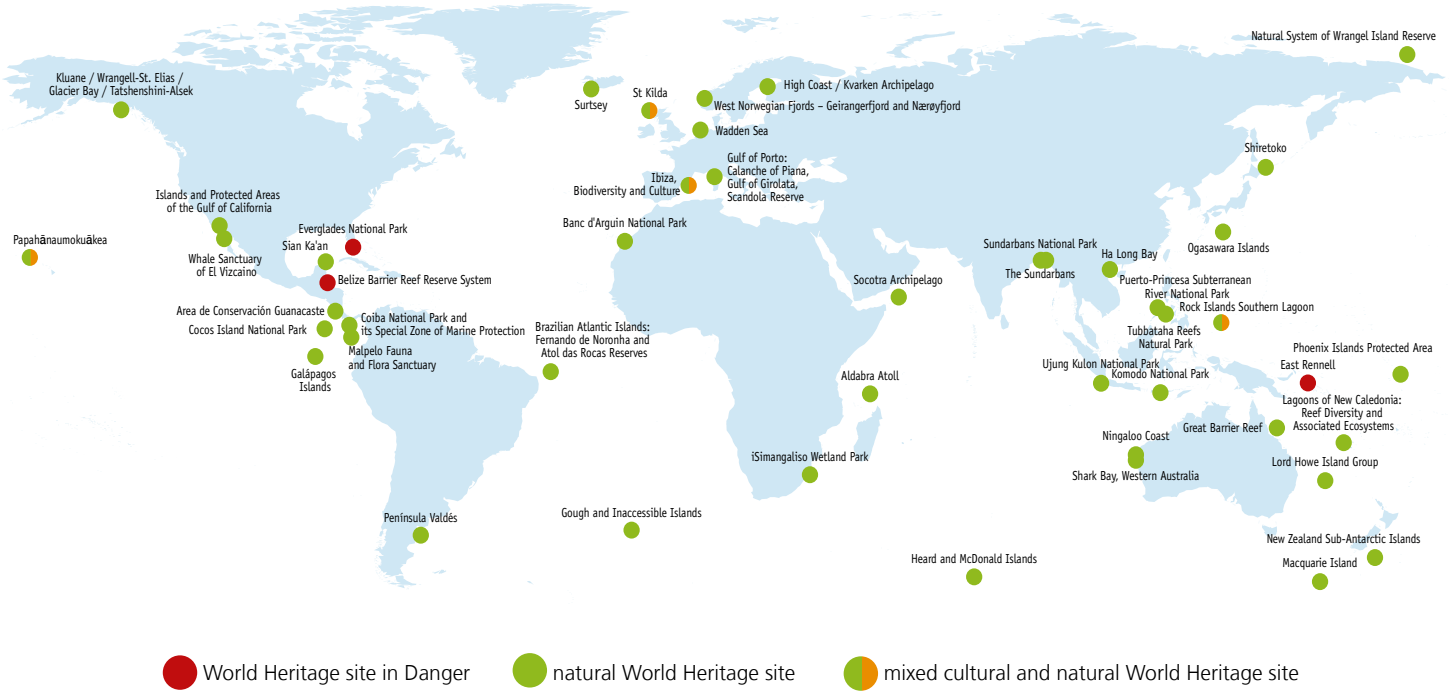
Uniquely beautiful jellyfish observed while exploring the informally named "Enigma Seamount" at a depth of 3,700 metres.
Image courtesy of NOAA Office of Ocean Exploration and Research, 2016 Deepwater Exploration of the Marianas.

For the purpose of this publication, the term 'marine areas beyond national jurisdiction' is used to describe both seabed areas beyond national jurisdiction as well as the water column above them more than 200 nautical miles from the coast. The ocean area is commonly referred to as the 'High Seas'. This area covers nearly 50% of the Earth.

Previous reports quoted in this publication have used the terms ABNJ (areas beyond national jurisdiction) and 'High Seas' interchangeably – which is not strictly correct. ABNJ include High Seas but also the seabed beyond national continental shelves.

For the purpose of this publication, the focus is on areas and natural features of possible Outstanding Universal Value (OUV) lying outside marine areas under national jurisdiction. Throughout this publication, both the concepts 'marine areas beyond national jurisdiction' and 'High Seas' are used. They refer thus only to marine areas and exclude for example the whole of the Antarctic continent.

2. Marine areas currently protected under the 1972 World Heritage Convention



The 47 marine sites inscribed on the World Heritage List (June 2016).

Since the inscription of the first truly marine site on UNESCO's World Heritage List in 1981, marine features and sites protected under the World Heritage Convention have grown into a global network that stretches from the tropics to the poles. As of June 2016, the UNESCO World Heritage List counts 47 marine sites located in 36 nations. The collection of sites includes global icons such as the Great Barrier Reef in Australia, the Tubbataha Reefs Natural Park in the Philippines or Galápagos Islands in Ecuador.

With the inscription of Papahānaumokuākea (United States of America) and Phoenix Islands Protected Area (Kiribati), the total surface of marine areas protected under the World Heritage Convention has more than doubled since 2010. World Heritage marine sites now cover about 10% of all marine protected areas on Earth by surface area.

3. The Bahrain Action Plan and the IUCN Marine Gap Analysis

A sponge covered with hundreds to thousands of tiny anemones also provides a home to several brittlestars (pink), crinoids or "sea lilies" (yellow), and a basket star (brown),
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2015 Hohonu Moana.

In 2007, the International Union for Conservation of Nature (IUCN) and its World Commission on Protected Areas hosted an international Marine Protected Areas (MPAs) Summit in Washington DC that resulted in a global Plan of Action, within which Marine World Heritage was identified as a key global strategic priority. As a result of the MPA Summit, in 2010 IUCN collaborated with the United Nations Educational, Scientific and Cultural Organization's (UNESCO) World Heritage Centre, the Arab Regional Centre for World Heritage and other partners in developing the *Bahrain Action Plan for Marine World Heritage*. [5] This plan was specifically developed to ensure that marine areas of OUV were accorded equal attention to World Heritage on land and to help ensure balance and proportional action for marine sites under the Convention.

Part of the Bahrain Action Plan highlighted what it called the '*reality of application of the World Heritage Convention*' which is that it is currently being applied to just half the world's surface. The remaining 50% is covered by the High Seas, areas of ocean beyond the responsibility of any individual country, which remain unrecognized under the Convention. These marine areas have features of potential OUV that are found nowhere else on Earth. The Plan acknowledged that in the coming years mechanisms will be found to protect the wildlife, habitats and value of ABNJ and recommended that *'to "future-proof" the Convention*

5 Laffoley, D. and Langley, J. 2010. *Bahrain Action Plan for Marine World Heritage. Identifying Priorities and enhancing the role of the World Heritage Convention in the IUCN-WCPA Marine Global Plan of Action for MPAs in our Oceans and Seas. Switzerland, IUCN.* http://whc.unesco.org/document/105357

it is critical that actions now commence to consider what might be protected in the open ocean and deep sea beyond national jurisdiction so that when mechanisms are identified, there is information available of how the Convention can play a similar role to the one it has played for areas currently under its jurisdiction.' [6]

This proposed approach was vindicated in 2013 by a major thematic study on Marine World Heritage by IUCN – whose special role is recognized as an official advisory body for natural World Heritage under the World Heritage Convention.[7] That study concluded that:

The World Heritage Convention is currently not applied to Areas beyond National Jurisdiction (ABNJ), which constitute about 60–66% of the ocean's surface, i.e. most of this three-dimensional biome, and which contain a number of unique and exceptional natural heritage values that know no national boundaries. The high seas undoubtedly include areas that would be regarded as meeting the natural World Heritage criteria. This has resulted in a significant gap that States Parties may wish to fill and has the potential to be addressed by developing a specific process for the selection, nomination, evaluation, and management of such marine World Heritage sites, consistent with international law as reflected in the United Nations Convention on the Law of the Sea (UNCLOS). Ongoing discussions at the United Nations on a possible new instrument under UNCLOS for conservation and sustainable use of marine biodiversity in ABNJ could provide a possible vehicle to address this gap.[8]

The High Seas were further highlighted as an important gap in the UNESCO World Heritage List in the study *Marine World Heritage: Toward a representative, balanced and credible World Heritage List.* The study used methods such as the marine ecoregions of the world and pelagic provinces of the world classification as designed by UNESCO's Intergovernmental Oceanographic Commission (IOC) in view of applying a systematic approach toward identifying gaps in the ocean.[9]

An unidentified blue shrimp, likely from near-surface waters.
© Sönke Johnson

"To 'future-proof' the Convention it is critical that actions now commence to consider what might be protected in the open ocean and deep sea beyond national jurisdiction so that the Convention can play a similar role to the one it has played for areas currently under its jurisdiction"

(2010 Bahrain Action Plan)

6 Para 3.3.7.(b) continued '…it was also felt that further exploration, in a similar vein, could be turned to how the Convention might interface with other international instruments and institutions. …International instruments of relevance include: Ramsar Convention, Convention on Biological Diversity and its Programme of Works on Protected Areas (CBD POWPA), Convention on Conservation of Antarctic Living Marine Resources (CCAMLR) and the Madrid Protocol to the Antarctic Treaty regarding Environmental Protection, the International Seabed Authority, the Migratory Species Convention, the regional seas conventions and agreements (e.g. OSPAR, Cartagena, Nairobi), International Maritime Organization (and designation of Particularly Sensitive Sea Areas), among others.'

7 *Marine Natural Heritage and the World Heritage List interpretation of World Heritage criteria in marine systems, analysis of biogeographic representation of sites, and a roadmap for addressing gaps*, IUCN 2013. The special role of IUCN is recognized in Articles 8(3) and 13(7), World Heritage Convention.

8 The report continued 'Although high seas and deep ocean areas suffer from a severe lack of information that may impede some analyses of potential OUV, data collection and analysis conducted by experts for the CBD-facilitated regional workshops to describe EBSAs offer a new and rich overview of potential MWHS.' See further below.

9 Spalding, M. 2012. *Marine World Heritage: Toward a representative, balanced and credible World Heritage List.* World Heritage Centre, Paris, UNESCO.

4. The External Audit recommendation on the implementation of the Global Strategy of the 1972 World Heritage Convention[10]

Thirty-eighth Session of the World Heritage Committee (Doha, 2014).
© UNESCO/Eric Esquivel

In 1994, the World Heritage Committee launched a Global Strategy for a representative, balanced and credible World Heritage List. By balanced it refers to 'representativity' among bio-geographical regions or events in the history of life and credibility concerns not only the number of sites inscribed, but the representativeness of sites from the different regions of the world and stages of the Earth's history. It refers in particular to the quality of management in designated World Heritage sites and the ability to address threats and dangers to bring them back to their normal conditions, if needed.[11] The Global Strategy aimed to avoid an overrepresentation of a small selection of regions or categories and to ensure that the World Heritage List reflects the broad diversity of the world's cultural and natural areas of OUV. Efforts to encourage nomination of properties from categories and regions currently not or largely underrepresented on the World Heritage List are crucial to implementing the Global Strategy.

To support implementation of the Global Strategy, the World Heritage Committee established the UNESCO World Heritage Marine Programme at the 29th session of the Committee held in 2005 in South Africa. The objective of the World Heritage Marine Programme was to ensure that all marine sites with existing or potential OUV are protected effectively and that they cover all major marine regions and marine ecosystem types in a balanced, credible and representative manner.

Successful global representation of exceptional marine features on the World Heritage List requires a thorough understanding of what is covered already and where other areas of OUV are that should be added. Essentially, all major marine regions and marine ecosystem types should be represented.

Despite the fact that marine areas covered under the World Heritage Convention has doubled since the inception of the

10 The General Assembly of States Parties to the World Heritage Convention at its 17th session requested the World Heritage Centre to provide the General Assembly at its 18th session in 2011 'with a summary of the work undertaken in relation to the reflection on the future of the Convention, including an independent evaluation by UNESCO's external auditor on the implementation of the Global Strategy from its inception in 1994 to 2011 and the Partnerships for Conservation Initiative (PACT), based on indicators and approaches to be developed during the 34th and 35th sessions of the World Heritage Committee.'

11 WHC-96/CONF.202/INF.9. Paris, 15 April 1996. http://whc.unesco.org/archive/1996/whc-96-conf202-inf9e.pdf

World Heritage Marine Programme, an external audit on the implementation of the Global Strategy[12] concluded that:

There are zones, such as the High Seas (part of the Arctic) and the Antarctic, to which the World Heritage Convention does not apply, zones that escape the sovereignty of States Parties. As the action plan for Marine World Heritage adopted in 2009 in Bahrain underlines, 50% of marine areas are located in the High Seas. If the Antarctic Treaty (1959) offers a collaborative workable mechanism focused on ocean conservation for that region, it is appropriate that States establish without delay workable provisions adapted for the High Seas, of which the natural heritage long preserved due to its isolation and the difficulty in exploiting its resources, is now threatened. The Bahrain expert workshop recommended establishing a list of sites of the High Seas that fulfilled the OUV criteria in order to give impetus to progress through the framework of the Convention on the Law of the Sea or the Convention on Migratory Species to better argue an eventual extension of the World Heritage Convention.

In its final independent evaluation report to the General Assembly of States Parties to the World Heritage Convention on the implementation of the World Heritage Global Strategy from its inception in 1994 to 2011, the UNESCO External Auditor recommended (in Recommendation No. 5 of the Audit) that the World Heritage Committee should:

> 'Reflect on appropriate means to preserve sites that correspond to conditions of outstanding universal value, which are not dependent upon the sovereignty of States Parties.'[13]

This is in light of the fact that the open ocean is a considerable proportion of the Earth's surface which has yet to receive consideration under this global Convention. This publication responds to that invitation to reflect on appropriate means by which the World Heritage regime might preserve sites of potential OUV in marine ABNJ.

> "It is appropriate that States establish without delay workable provisions adapted for the High Seas of which the natural heritage long preserved due to its isolation and the difficulty in exploiting its resources, is now threatened"
>
> (2011 External Audit on the implementation of the Global Strategy)

12 WHC-11/35.COM/INF.9A. Paris, 27 May 2011, p. 24. http://whc.unesco.org/archive/2011/whc11-35com-9Ae1.pdf

13 WHC-11/35.COM/INF.9A. Paris, 27 May 2011, p. 24. http://whc.unesco.org/archive/2011/whc11-35com-9Ae1.pdf

5. Developments at the United Nations General Assembly

A view of the Assembly Hall as Sam Kutesa (on screens), President of the sixty-ninth session of the Assembly, chairs the meeting. 19 June 2015.Adoption UNGA/RES/69/292
© UN Photo/Rick Bajornas

In 2004, the United Nations General Assembly (UNGA) had agreed to the recommendation of the United Nations Informal Consultative Process on the Oceans and the Law of the Sea (UNICPOLOS) to establish an Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. This Working Group on biodiversity beyond national jurisdiction (BBNJ) has been meeting since then to assess the risks to biodiversity in ABNJ and to assess the need for a new instrument, perhaps in the form of a third Implementing Agreement to the 1982 United Nations Convention on the Law of the Sea, to address *lacunae* in the existing system of High Seas governance.

Issues highlighted in the discussions have included the absence of a global instrument regulating the establishment and monitoring of MPAs in ABNJ (even though protected areas have proven to be extremely effective in maintaining biodiversity in coastal contexts), the absence of comprehensive environmental impact assessments (EIAs) for new activities in ABNJ, as well as the lack of coordination between those international organizations that are charged with regulating specific sectoral activities, including regional fisheries management organizations (RFMOs). In January 2015, the BBNJ Working Group finalized recommendations to the UNGA to 'develop an international legally-binding instrument under the Law of the Sea Convention on the

conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.'[14]

Moreover, despite the fact that the deep seabed is formally declared to be the '*common heritage of mankind*' and that the High Seas are open to all, there is increasingly global recognition that marine ABNJ are an important and to date rather neglected aspect of the legal regime for the oceans. Awareness of the value of the ocean in general is no longer confined to just nearshore areas, reefs or beaches, and now extends to open ocean areas and features in ABNJ such as seamounts, cold water corals and hydrothermal vents, even ship wrecks, as well as critical habitats for marine migratory species.

After a decade of discussion, on 19 June 2015, the UNGA -- following a recommendation of the BBNJ working Group from January 2015 -- adopted a resolution providing for an intergovernmental conference to negotiate an 'international legally binding instrument', under UNCLOS, on the Conservation and Sustainable Use of Marine Biological Diversity in Areas Beyond National Jurisdiction. The first session of the Preparatory Commission took place in April 2016.

14 The text is at http://www.un.org/ga/search/view_doc.asp?symbol=A/69/780 (last accessed 3 July 2015). The recommendations of the Working Group also envisage the establishment of a preparatory committee, to begin work in 2016 and to report to the UNGA in 2017 with recommendations on the elements of a text..

6. Future collaboration

As discussed above, the 2013 analysis by IUCN suggested that the omission of ABNJ from the ambit of the World Heritage Convention has resulted in significant gaps in the coverage of the Convention.[15]

The study also highlighted the work of other organizations which are already working in ABNJ and it felt that there was an important opportunity for the World Heritage Convention to establish linkages and complementarities with the work of others. The Study suggested that 'further exploration … could be turned to how the Convention might interface with other international instruments and institutions.'

One example is the Convention on the Conservation of Biological Diversity (CBD). The CBD Secretariat has convened a series of workshops over the past five years in collaboration with regional marine organizations to identify and describe 'Ecologically or Biologically Significant Areas' (EBSAs) in the marine realm, particularly in ABNJ.[16] The application of the concepts and criteria the World Heritage Convention applies to identify areas of OUV – concepts that have matured for over 40 years and produced ample conservation successes and best practices – could prove particularly valuable in the work toward the protection of EBSAs in areas beyond national jurisdiction. Also, many other bodies would be ideal collaborators in the development of protection and management regimes for such sites.[17]

"The concepts and criteria of the World Heritage Convention have matured for over 40 years and produced ample conservation successes and best practices"

15 *Marine Natural Heritage and the World Heritage List interpretation of World Heritage criteria in marine systems, analysis of biogeographic representation of sites, and a roadmap for addressing gaps*, IUCN 2013.
16 For further details see the map and explanations at https://www.cbd.int/ebsa/
17 See footnote 7 above.

PART II
Potential Outstanding Universal Value in the High Seas

2

An unidentifed larval deep-sea angler fish.
© Sönke Johnsen

1. Introduction

Hydrothermal vents in the Lau Basin.
Photo courtesy of the Woods Hole Oceanographic Institute and Charles Fisher, Pennsylvania State University.

This publication takes a systematic approach to illustrating how the concept of OUV could be applied in ABNJ. The approach used is mindful that the purpose of this publication is not to propose a possible tentative list of potential sites, but rather simply to demonstrate through a small selected number of illustrations the need for, and the urgency of, the identification and protection of World Heritage sites in the High Seas. The selected illustrations reflect a sample of the unique variety of ecosystem types, natural marine phenomena and biodiversity that exist in the High Seas and would merit World Heritage recognition. While the research for potential areas of OUV in the High Seas has focused on natural marine features and ecosystems, nothing would prevent the identification of cultural sites in the High Seas at a later stage.

The selection process to illustrate the potential for OUV for this publication has been rigorous and multifaceted. A preliminary desktop assessment of potential areas to illustrate possible OUV in the High Seas was undertaken. The results formed the basis for a more inclusive discussion during a two-day technical working meeting with High Seas experts from around the world. The agenda and list of participants of the meeting are included in Annex II. The conclusions of the meeting have been integrated in this publication.

It is important to underline that still only a small portion of this vast majestic space, the High Seas, is known to the current generation of experts. The large majority of features and phenomena in the High Seas is yet to be discovered and named by science. This reality further underlines that the selection of illustrations presented in this publication is no more than a first reflection and many other High Seas features might be considered of potential OUV in the future.

2. Outstanding Universal Value: the concept that underpins World Heritage[18]

Central to the Word Heritage Convention is the concept of Outstanding Universal Value (OUV). OUV defines why a place is considered so significant as to justify recognition and inscription on the UNESCO World Heritage List. OUV is what underpins the whole of the World Heritage Convention. Nomination of a site for consideration of its listing as World Heritage is decided by a determination of its OUV. The ultimate decision over whether or not a site is of OUV lies with the World Heritage Committee that meets annually.[19]

Firstly, this implies that the features of the proposed site are outstanding globally, and to do this effectively requires a global comparative analysis, assessing the features of the site against other sites on a global basis. Secondly, a screening of existing properties on the World Heritage List must be undertaken, to ensure that the site in question is not already addressed by a better example being included on the List, and includes features that are lacking from the existing portfolio of World Heritage sites. Both of these processes require significant investment in conducting the appropriate level of data collection – *in situ* and from the literature – both on the site in question, and its comparison against sites around the world.

The selection of illustrative sites of possible OUV in the High Seas involved the following approach:

Outstanding: the approach has not been to select numerous examples of locations with similar processes and ecosystems, but rather to review existing literature and select unique examples across ocean basins to showcase the different types of ecosystems, natural phenomena and biodiversity of possible OUV that exists in ABNJ. Thus, the illustrative list included in this publication showcases some of the very best examples of possible OUV in the High Seas, selected on the basis of existing scientific work. The intent has been to develop illustrations of potential OUV in the High Seas to demonstrate within a minimum number of locations how the different World Heritage criteria could be met in the High Seas.

Universal: the approach has been to view marine ABNJ as a whole for this exercise, in order to consider sites of the most widespread concern for all of humanity. Thus, while identification of potential OUV has had regard for geographical distribution of examples cited in this publication, the approach has been to select a range of the most compelling examples known globally of differing aspects of potential OUV for marine ABNJ as a whole, thus fulfilling this important aspect of the Convention.

Outstanding Universal Value (OUV)		
Outstanding – the site should be *exceptional*. The *World Heritage Convention* sets out to define the geography of the superlative – the most outstanding natural and cultural places on Earth.	**Universal** - The scope of the Convention is *global* in relation to the significance of the properties to be protected as well as its importance to all people of the world. Sites cannot be considered for OUV from only a national or regional perspective.	**Value** – implies clearly defining the *worth* of a property, ranking its importance based on clear and consistent standards, including the recognition and assessment of its integrity.

18 Information about OUV and World Heritage criteria is available at : http://whc.unesco.org/criteria/

19 Information about the World Heritage Committee is available at: http://whc.unesco.org/en/committee/

Small polychaete worms roaming over the tentacles of an anemone.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2015 Hohonu Moana.

Value: two processes were run in tandem to ensure that only a selection of the most important locations are included as illustrations. The process drew on analyses of existing information of ecosystems, biodiversity and marine phenomena in marine ABNJ. The information is largely based on the EBSA processes and conclusions developed under the CBD but also draw on experience from other approaches such as OSPAR[20] and specific regional sea surveys such as those for seamounts. Such exercises have already identified, based on current knowledge and the experience of countless scientists, and through rigorous processes, lists of important areas in the world ocean. So there was, through this element of the approach, a solid scientific foundation to immediately draw from – with the CBD process being the largest and most comprehensive with full documentation publically available. Alongside this, the study also accessed the knowledge of a number of highly experienced advisors and scientists specialized in the field of High Seas ecosystems and biodiversity to identify their top locations in marine ABNJ. This information was then assimilated into the illustrative list of sites included here and finalized through an iterative process with the leading scientists concerned. An additional important determinant alongside this was to ensure adequate scientific documentation was available to allow for an adequate description of the possible OUV of the respective illustrations. A central consideration that needs to be taken into account when reflecting on areas of possible OUV in the High Seas is the fact that a large majority of species and phenomena are yet to be discovered by science.

20 OSPAR is the mechanism by which 15 Governments and the European Union cooperate to protect the marine environment of the North-East Atlantic.

3. The criteria that determine Outstanding Universal Value

Nominating a site for inscription on the UNESCO World Heritage List requires a rigorous process of identifying the features of potential OUV at a site, and making a case for inscription. The concept of OUV itself is based on three foundations:

1) A property is required to meet one or more of the World Heritage criteria;
2) A property is required to meet the conditions of integrity (and authenticity if relevant);
3) Property needs to meet the requirements for protection and management.

All three aspects must be in place for a property to be recognized as of OUV and as such become eligible for inscription on the UNESCO World Heritage List.

World Heritage criteria: Of the ten World Heritage criteria, only four relate to natural World Heritage. As set out in the introduction, only natural phenomena in the High Seas have been considered for the purpose of this publication. The Table below lists the four natural World Heritage criteria.

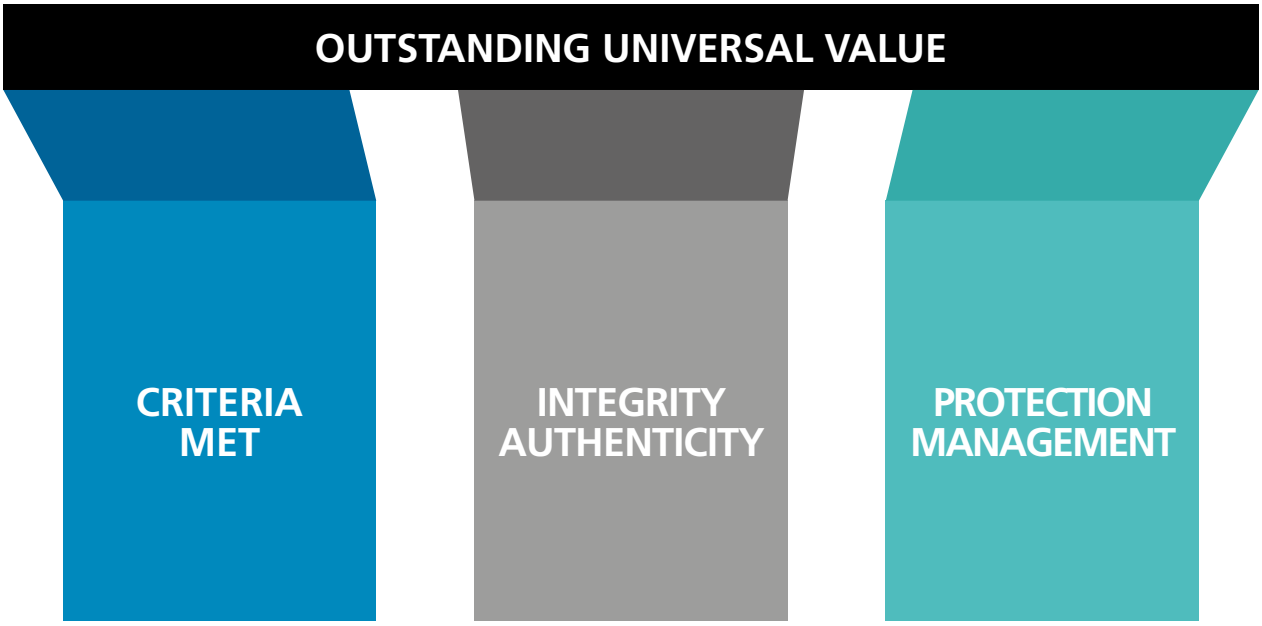
Since the primary documents for World Heritage listing do not make detailed reference to physical marine or ocean processes, IUCN has developed guidance for marine systems (Obura et al., 2012; Abdulla et al., 2013). Criterion viii refers to earth history, geological processes, landforms, geomorphic and physiographic features, clearly targeting physical and geological features of the planet, in contrast to the biological features of criteria ix and x. Physical oceanographic features may be most directly related to these terms, so criterion viii has been identified as the most appropriate one for physical ocean processes, including water masses, currents, waves, coastal and land-sea interaction processes, and polar ice.

An Unidentified Swimming Organism.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2015 Hohonu Moana.

Application of criteria vii, ix and x in marine systems can be considered to be consistent with their application on land. Criterion vii is generally considered only where sites already meet at least one of criteria viii, ix or x. Criterion ix explicitly mentions 'coastal' and 'marine' and biological oceanographic processes, and habitat and ecosystem dynamics can be treated equivalently in the sea as on land. Criterion x, focusing on species and critical habitats for their conservation, can similarly be applied in the same way both in the sea and on land.

Inscription criteria			
vii. Contain superlative **natural phenomena** or areas of **exceptional natural beauty** and aesthetic importance;	**viii.** Be outstanding examples representing **major stages of Earth's history**, including the record of life, significant ongoing **geological processes** in the development of landforms, or significant geomorphic or physiographic features;	**ix.** Be outstanding examples representing significant ongoing **ecological and biological processes** in the **evolution and development** of terrestrial, fresh water, coastal a nd marine ecosystems and communities of plants and animals;	**x.** Contain the most important and significant **natural habitats** for in situ **conservation of biological diversity**, including those containing threatened species of OUV from the point of view of science or conservation.

The 3 pillars of the concept of Outstanding Universal Value



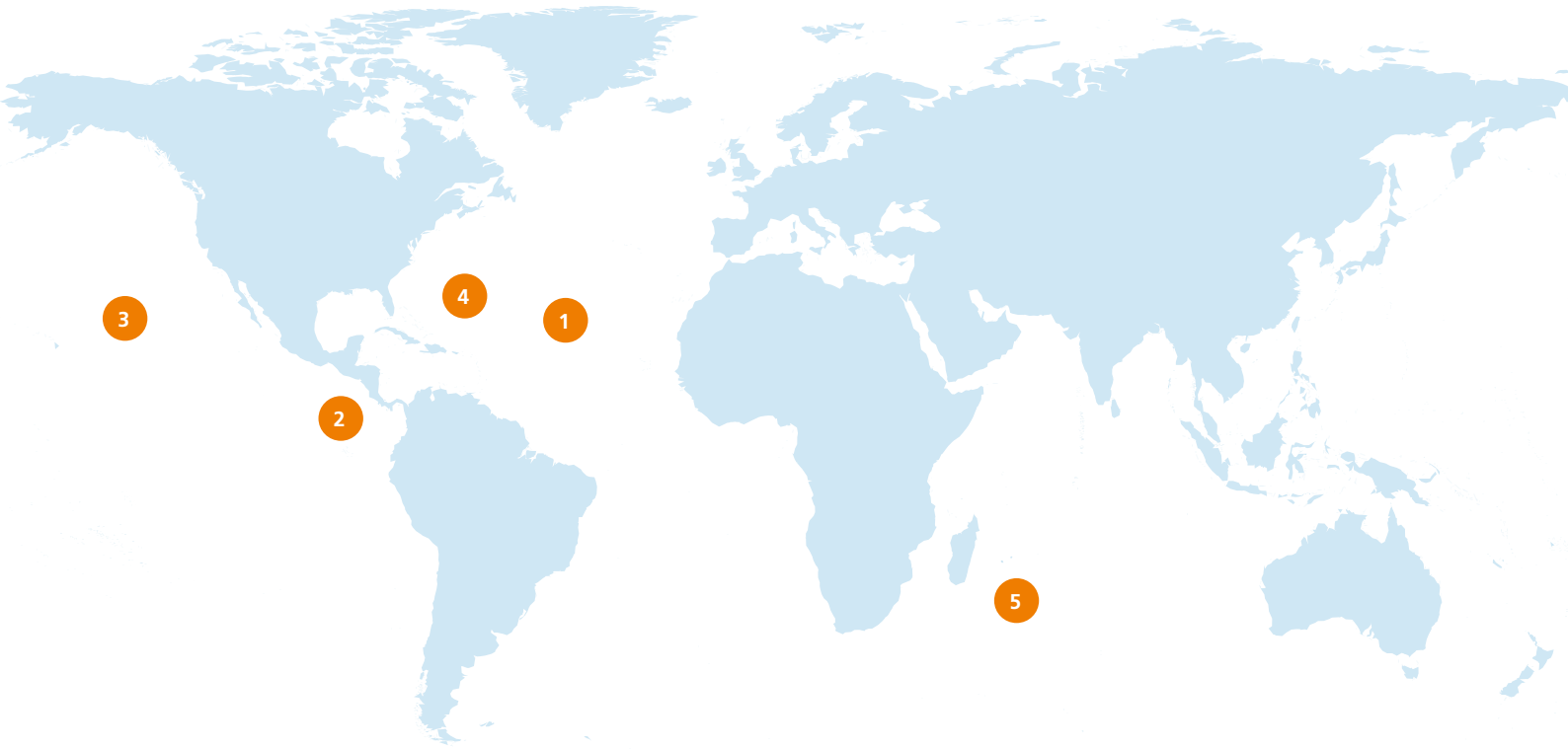
Integrity: It is not enough for a site to meet the World Heritage criteria only. A site must also meet the conditions of 'integrity' and/or 'authenticity' (the latter for cultural sites) and must have an adequate protection and management system to ensure its safeguarding. The condition of integrity is a measure of the wholeness and intactness of the heritage of the site and its attributes that are established when an adequate and long-term protection and management system is in place to ensure its safeguarding. Thus, the conditions of integrity and/or authenticity are an integral element when considering the concept and application of OUV and without both having been met a site should not be listed. This question is even more important when looking at sites that straddle different jurisdictions, or extend to ABNJ.

Protection and management: Recognition of OUV and inscription is only part of World Heritage. The other part is the assurance that the characteristics for which a site is recognized as World Heritage will be maintained. Properties that are of comparable importance in terms of their value but in poor condition, or without effective protection and management, may be regarded as having a weaker claim or potential OUV compared with a property in good condition and with a high standard of protection and management. Obviously, this consideration is of particular concern for the sites of potential OUV in the High Seas considering the lack of an overall protection mechanism currently in place. While unified mechanisms and actions are being considered by the United Nations under UNCLOS, 'competent authorities' do also already exist to some extent in ABNJ. These sectoral bodies often have explicit requirements to have due regard for the environment in executing their functions and so provide a starting point to ensure any OUV recognized in the future can be secured.

Reporting and Monitoring: Inscribing a site on the World Heritage List is the beginning of a permanent relationship with the Convention. Site managers and local and national authorities continuously work towards managing, monitoring and preserving the World Heritage properties. States Parties have an obligation to regularly prepare reports about the state of conservation and the various protection measures put in place at their sites. These reports allow the World Heritage Committee to assess the conditions at the sites and, eventually, to decide on the necessity of adopting specific measures to resolve recurrent problems. One such measure is the inscription of a property on the List of World Heritage in Danger. In situations where the site deteriorates to a point where the OUV is lost, the World Heritage Committee may decide to remove it from the World Heritage List. These actions under the Convention are set out in the Operational Guidelines for the Implementation of the World Heritage Convention, particularly under paragraphs 178 – 198 but especially 192 onwards.[21]

21 *Operational Guidelines for the Implementation of the World Heritage Convention*, Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, UNESCO, WHC.15/01, 8 July 2015. http://whc.unesco.org/en/guidelines/

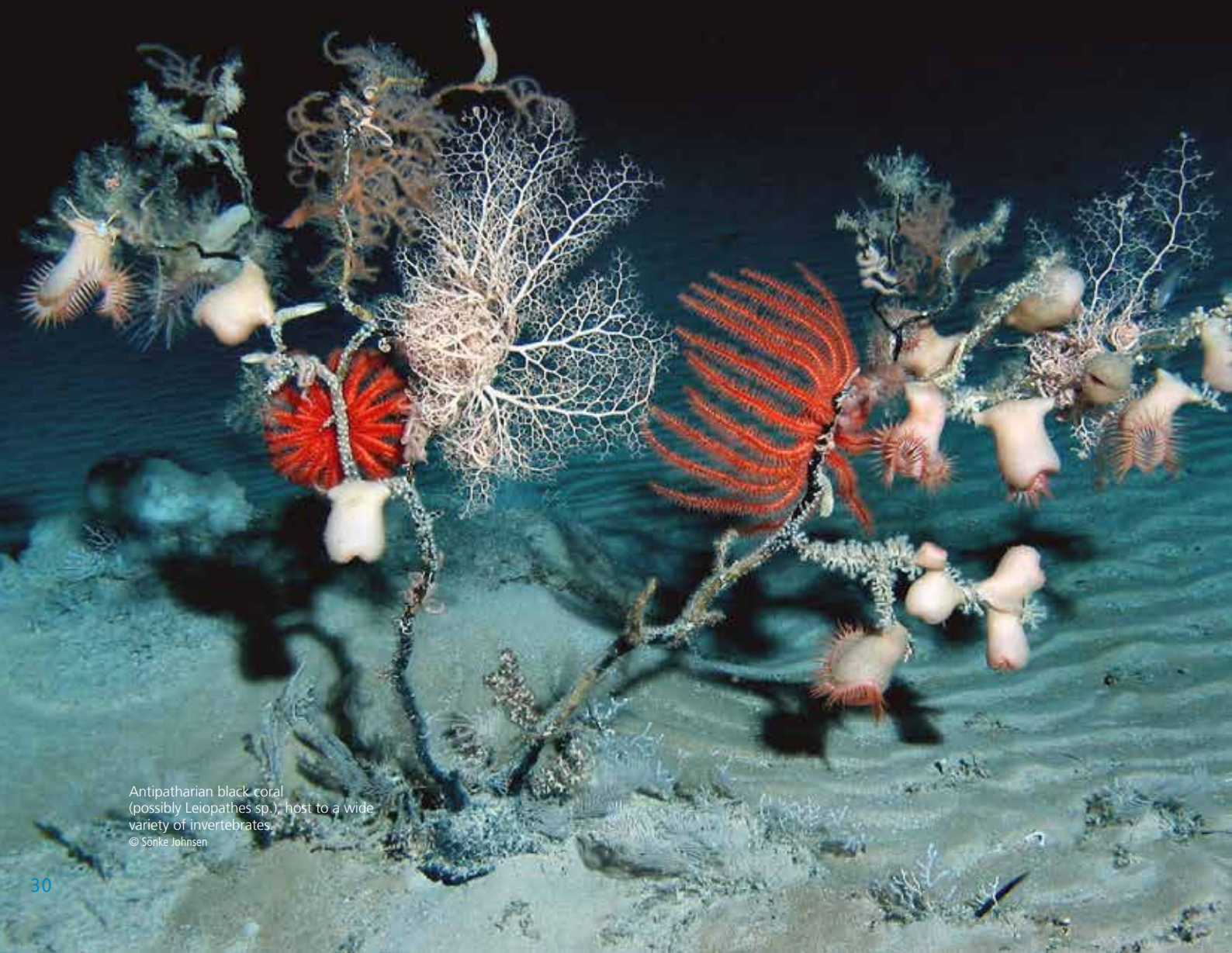
4. Illustrations of potential Outstanding Universal Value in the High Seas



1. The Lost City Hydrothermal Field 2. The Costa Rica Thermal Dome 3. The White Shark Café
4. The Sargasso Sea 5. The Atlantis Bank

Illustrations of potential Outstanding Universal Value in the High Seas.

Based on the considerations detailed in the previous sections, this chapter brings together a first snapshot of areas and natural features of potential OUV in the deep ocean. While a systematic approach has been taken toward identifying this collection of sites, it is by no means a comprehensive tentative list of potential OUV in the High Seas. Many other unique features in the High Seas would likely also merit World Heritage recognition while overall still very little of the deep ocean is actually known to science. The sites identified in the next sections are thus but a sample of the truly iconic treasures our deep oceans harbour and are meant to inspire their possible future protection as part of our global heritage legacy of humankind.



Antipatharian black coral (possibly Leiopathes sp.), host to a wide variety of invertebrates.

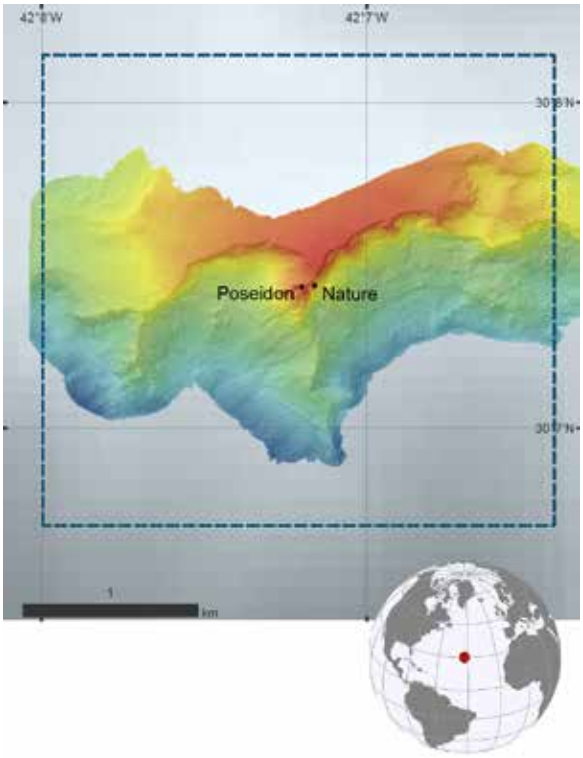
Ocean	Name	Main features that could make up the sites' potential Outstanding Universal Value
PACIFIC OCEAN	**The Costa Rica Thermal Dome**	The Costa Rica Thermal Dome is a unique oceanic oasis, a wind-driven upwelling system, which forms a highly productive area and a critical habitat, which provides singular spawning sites, migration pathways and feeding grounds to multiple endangered and commercially important species.
	The White Shark Café	The White Shark Café is a pristine open ocean region approximately halfway between the North American mainland and Hawaii that is the site for the only known offshore aggregation of north Pacific white sharks. The Café provides a unique offshore habitat where these irreplaceable marine predators congregate in cobalt blue pristine waters.
ATLANTIC OCEAN	**The Sargasso Sea**	The 'Golden Floating Rainforest of the Ocean', the Sargasso Sea, is home to an iconic pelagic ecosystem built around the floating *Sargassum* seaweeds, the world's only holopelagic algae. It was first viewed by Columbus on his first voyage in 1492 and has been a place of myth and legend ever since. Its global importance derives from a combination of physical and oceanographic structures, its complex pelagic ecosystems, and its role in global ocean and earth system processes.
	The Lost City Hydrothermal Field	The Lost City Hydrothermal Field is a remarkable geobiological feature (biotope) in the deep sea (700-800 metre water depth) that is unlike any other ecosystem yet known on Earth. The site, dominated by the *Poseidon* carbonate monolith (a 60-metre high carbonate edifice), was discovered serendipitously in 2000 during an *Alvin* dive on the Mid-Atlantic Ridge, and it is still being explored.
INDIAN OCEAN	**The Atlantis Bank**	The Atlantis Bank, located within sub-tropical waters of the Indian Ocean, was the first tectonic sunken fossil island ever studied. The complex geomorphology of old headlands, precipitous cliffs, stacks, beaches and lagoons harbours a very diverse deep-sea fauna at depths from 700 to 4,000 metre characterized by large anemones, large armchair-sized sponges, and octocorals. Large *Paragorgia* colonies are particularly notable.

The following sections provide a brief synopsis of the potential justification of World Heritage criteria for each of the respective sites. More elaborate descriptions are available in the appendices of this publication (available online at http://whc.unesco.org/en/marine-programme/).

The Lost City Hydrothermal Field

1. Introduction

The Lost City Hydrothermal Field was discovered in 2000 and is unlike any other ecosystem yet known on Earth. It is a remarkable feature in the deep sea (700-800 metre water depth), formed by a combination of geological and biological forces. It is an area of active hot spring venting where serpentinite cliffs 'weep' hot fluids, producing delicate finger-like outgrowths and multi-pinnacle chimneys, which has been ongoing for 120,000 years. The site is dominated by the Poseidon carbonate monolith, a 60-metre tall edifice made of carbonate, the raw material of chalk and limestone. Endemic invertebrate species are likely to exhibit unusual biochemical and physiological adaptations that have not yet been described in nature. The Lost City has been suggested as presenting an example of the chemical precursors for the origin of life, attracting the interest of the U.S. National Aeronautics and Space Administration (NASA) as a means of identifying the chemical signatures of life on other planets and moons.



The Lost City Hydrothermal Field. Data: Bathymetry (Karson et al., 2015) and hydrothermal vents (Kelley et al., 2007).

2. Threats

The main threat is from indirect impact from deep-sea mining for minerals. The rugged seabed topography in the region is such that fishing is unlikely to be an issue.

3. Potential Outstanding Universal Value

3.1. Potential justification of World Heritage Criteria

CRITERION VII – SUPERLATIVE NATURAL PHENOMENA OR NATURAL BEAUTY AND AESTHETIC IMPORTANCE

The Lost City Hydrothermal Field is globally singular among all known hydrothermal sites in the eerily lovely sculpture of its carbonate precipitates, their size and longevity (120,000 years).

CRITERION VIII – MAJOR STAGES IN EARTH'S HISTORY AND GEOLOGICAL PROCESSES

The Lost City Hydrothermal Field presents a unique example of fluid chemistry, of lower-temperature (<150 °C) weathering of ultramafic (upper mantle) rock (peridotite) exposed to seawater into serpentinite (a process called 'serpentinization'), and associated microbial and invertebrate communities. Discoveries made at this site have fundamentally expanded our understanding of the diversity of hydrothermal processes on Earth and potentially in extra-terrestrial oceans.

CRITERION IX – SIGNIFICANT ECOLOGICAL AND BIOLOGICAL PROCESSES IN THE EVOLUTION OF ECOSYSTEMS, COMMUNITIES OF PLANT AND ANIMALS

The Lost City Hydrothermal Field is postulated as a contemporary analogue for conditions where life on early Earth may have originated and for conditions that might support life within oceans of extra-terrestrial planetary bodies.

CRITERION X – SIGNIFICANT BIOLOGICAL DIVERSITY AND THREATENED SPECIES OF OUV

Many of the taxa of the Lost City Hydrothermal Field – microbial and invertebrate – are so far known only from this site and represent 'living libraries', with biochemical and physiological adaptations to their extreme environment yet to be understood.

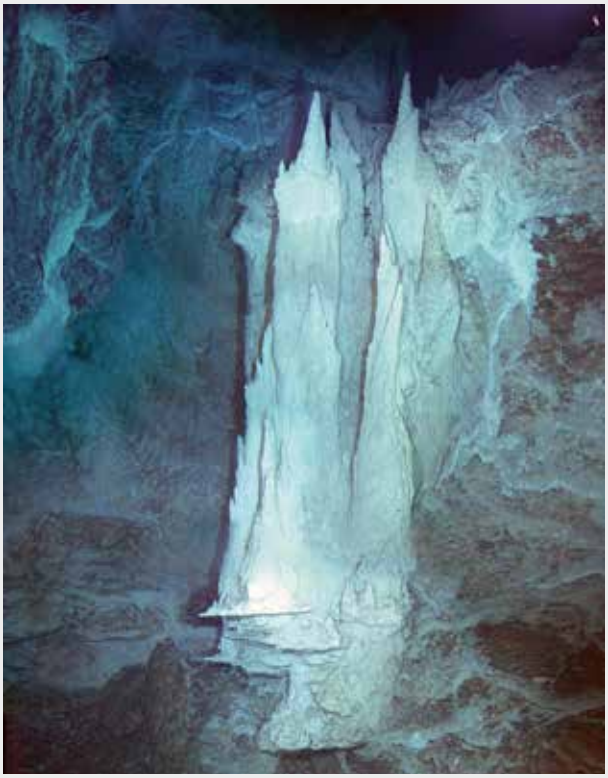
3.2. Geographic scale and site integrity

The Lost City Hydrothermal Field extends for at least 400 metres across the terrace on top of the Atlantis Massif in the northeast Atlantic. A 20-km wide buffer zone around the Lost City Hydrothermal Field would safeguard the integrity of this site.

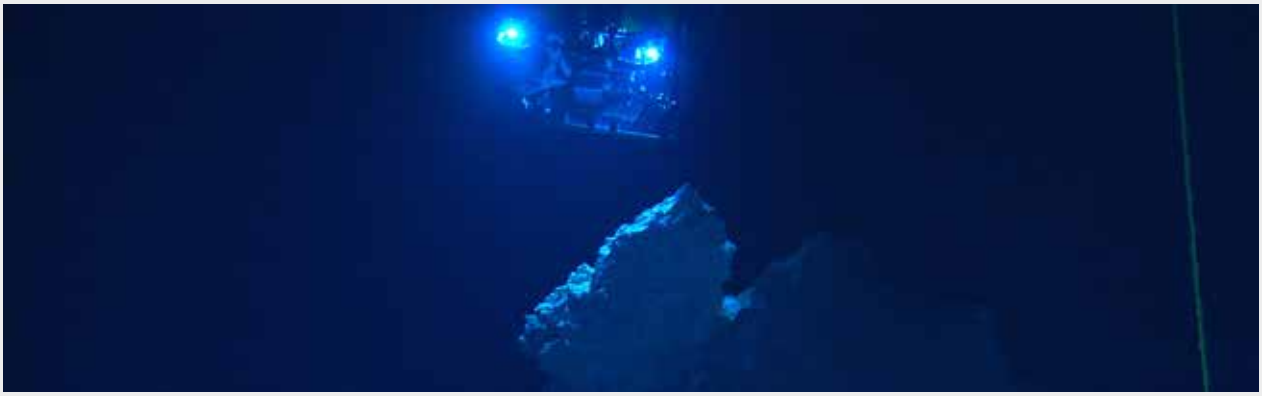
3.3. Protection and management

No management system is currently in place for this site. The site would qualify as a Vulnerable Marine Ecosystem (VME) under the criteria of the Food and Agriculture Organization of the United Nations (FAO) and be subject to management by a Regional Marine Fisheries Organization (RMFO).

Photomosaic of a 13 m-tall carbonate chimney called Ryan. Long term seepage of fluids from steep cliffs bounding the eastern side of the Lost City Hydrothermal Field has resulted in beautiful arrays of narrow pinnacles that reach many tens of meters in height.



The three-story-tall actively venting carbonate tower called IMAX protrudes from the north face of a much larger edifice called Poseidon in the Lost City Hydrothermal Field. Poseidon rises ~60 m above the surrounding seafloor. The area has been active for >120,000 years.



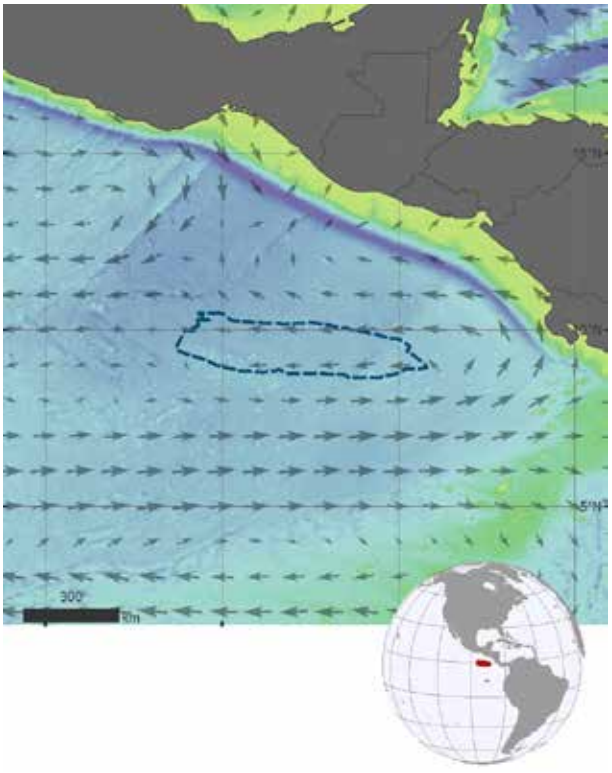
Space shot to our own planet: ROV Hercules approaches a ghostly, white, carbonate spire in the Lost City Hydrothermal Field, about 760 metre below the surface of the Atlantic Ocean.
Image courtesy of IFE, URI-IAO, UW, Lost City science party, and NOAA.

Deep-sea jelly fish, possibly *Poralia rufescens*, undulating several meters above the seafloor just south of the IMAX vent at Lost City.
Image courtesy of IFE, URI-IAO, Lost City science party, and NOAA

The Costa Rica Thermal Dome

1. Introduction

The Costa Rica Thermal Dome is an oceanic oasis of high productivity in the Eastern Tropical Pacific, created through an interaction between wind and currents and covers a 300-500 km wide area. Although mobile, as most oceanographic features are, its location and presence off the coast of Costa Rica and Central America are reliable and predictable. Its high primary productivity attracts large ocean-going fish, marine mammals and marine mega-predators such as sharks, tuna, dolphins and whales. It is part of a migration corridor for critically endangered leatherback turtles. The high productivity of the Costa Rica Thermal Dome provides an outstanding year-round feeding and breeding habitat for the endangered blue whale, as well as critical habitats for other emblematic marine vertebrates, such as turtles and dolphins.



The Costa Rica Thermal Dome. Data: Bathymetry (GEBCO 2014) and surface currents (Lumpkin and Johnson 2013).

2. Threats

The Costa Rica Thermal Dome is exposed to threats and pressures from a variety of anthropogenic impacts, especially shipping traffic, overfishing, illegal, unreported and unregulated fishing (IUU), pollution from marine and land-based sources (agriculture, wastewater) and climate change.

3. Potential Outstanding Universal Value

3.1. Potential justification of World Heritage Criteria

CRITERION VIII – MAJOR STATES IN EARTH'S HISTORY AND GEOLOGICAL PROCESSES

The Costa Rica Thermal Dome was first observed in 1948, recreated seasonally through an interaction between coastal wind and currents. It is defined by a globally unique shoaling of the generally strong, shallow thermocline with upwelling of cool, nutrient-rich water, which promotes blooms of surface plankton that nurture a globally exceptional environment for highly migratory marine predators. The upwelling at the Dome persists throughout the summer and early autumn and diminishes through December-January.

CRITERION IX – SIGNIFICANT ECOLOGICAL AND BIOLOGICAL PROCESSES IN THE EVOLUTION OF ECOSYSTEMS, COMMUNITIES OF PLANT AND ANIMALS

The upwelling of deep, nutrient-rich water at the Costa Rica Thermal Dome is an incredible ecological process that results in an area of high primary production which is heavily used by highly migratory marine predators such as tuna, billfish, sharks, manta rays, dolphins and whales, in particular endangered blue whales. The unique ecological process forms part of the migratory corridor of a population of endangered leatherback turtles nesting in Costa Rica, and all life stages of blue whale can be found here.

CRITERION X – SIGNIFICANT BIOLOGICAL DIVERSITY AND THREATENED SPECIES OF OUV

The blue whale is classified as an endangered species on the IUCN Red List, but is likely to meet the criterion for Critically Endangered. The Eastern North Pacific blue whale population, at approximately 3,000 individuals, is the largest in the world, and the Costa Rica Thermal Dome provides critical habitat for feeding, mating, breeding, calving and raising calves. Surrounded by oligotrophic ocean, the high productivity of the area provides habitat for abundant communities of phytoplankton and zooplankton, which in turn provide a source of food for squid, commercially important tunas and cetaceans. It contains critical habitats for other IUCN Red List species such as the leatherback turtle.

3.2. Geographic scale and site integrity

The proposed boundary encapsulates the thermal dome, which has a distinct biological habitat 300–500 km across and provides the basis for securing its integrity.

3.3. Protection and management

The Costa Rica Thermal Dome was nominated as an Ecologically or Biologically Significant Area (EBSA) in 2009. There is currently no management system in place that could adequately protect the site's unique characteristics.

Balaenoptera musculus (blue whale).

Manta ray.

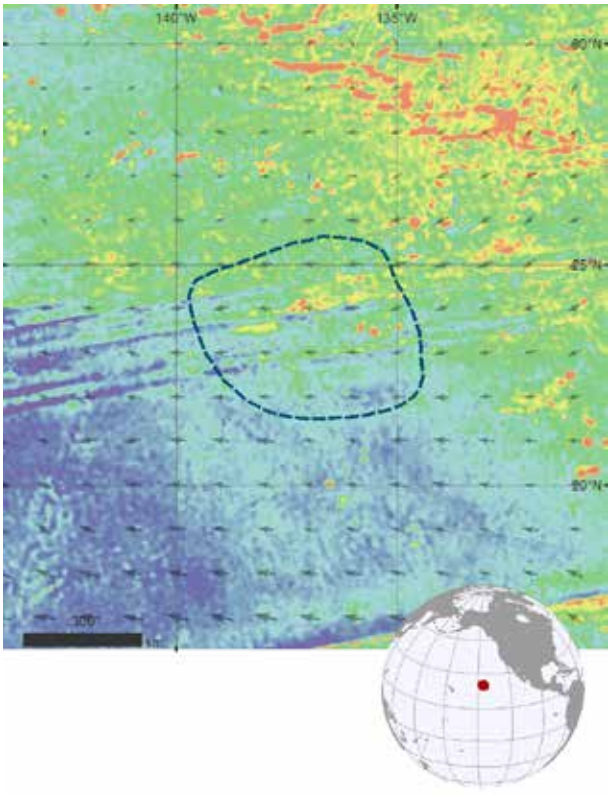
Yellow fin tuna fast moving in the ocean.

Leatherback sea turtle crawling up the beach to complete the nesting process.

The White Shark Café

1. Introduction

Approximately halfway between North America and Hawaii, in the vastness of the eastern Pacific, there is a place that to a human observer looks featureless and unremarkable. It is however of globally unique importance to one of the ocean's largest hunters, the great white shark, which migrate far offshore, congregating in this remote spot, probably to feed and mate. Researchers call it the White Shark Café. The tagging data indicates that this is a seasonal aggregation site for the majority of the adult white shark population in the north-eastern Pacific. No other place like it is known anywhere else in the world. Electronic tagging data have shown that in addition to white sharks, other pelagic shark species including mako, salmon, blue sharks, and tunas (albacore, bigeye and yellowfin tunas) also migrate to this distinct and enigmatic region of the subtropical gyre.



The White Shark Café. Data: Bathymetry (GEBCO 2014) and surface currents (Lumpkin and Johnson 2013).

2. Threats

The main threat is fishing and in particular the international longline fleet that covers the international waters that include the White Shark Café.

3. Potential Outstanding Universal Value

3.1. Potential justification of World Heritage Criteria

CRITERION VII – SUPERLATIVE NATURAL PHENOMENA OR NATURAL BEAUTY AND AESTHETIC IMPORTANCE

Pelagic environments support important species aggregations, and coastal species often utilize offshore habitat during some phase of their life cycle. Photo identification of white shark individuals and acoustic and satellite tagging has shown that white sharks occupy this predictable aggregation site in the waters off North America, most likely determined by the sub-tropical gyre and the currents circulating around it.

CRITERION IX – SIGNIFICANT ECOLOGICAL AND BIOLOGICAL PROCESSES IN THE EVOLUTION OF ECOSYSTEMS, COMMUNITIES OF PLANT AND ANIMALS

Genetic studies demonstrate that global white shark populations have a discrete subpopulation structure with unique demographics in South Africa, Australia, the North-East Pacific Ocean, the North-West Atlantic and the Mediterranean Sea. Electronic tagging has shown that North-East Pacific Ocean sub-adult and adult white sharks seasonally inhabit warmer offshore waters of the subtropical gyre (the White Shark Café), and return to the California Current to coastal foraging zones.

CRITERION X – SIGNIFICANT BIOLOGICAL DIVERSITY AND THREATENED SPECIES OF OUV

White sharks are protected internationally under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES - Appendix II) and listed as Vulnerable under the IUCN Red List. In the North-East Pacific Ocean, the unique population of white sharks are of significant conservation concern.

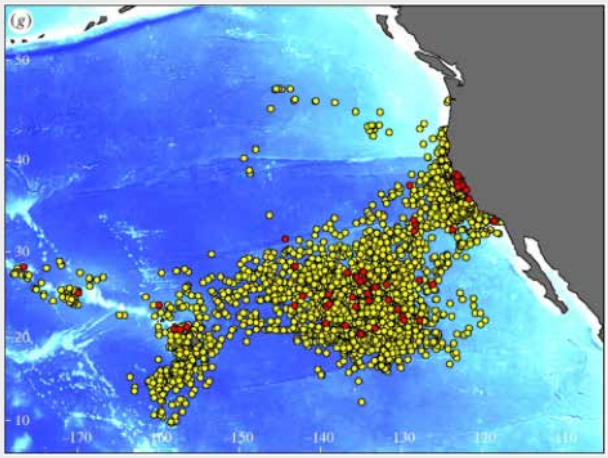
3.2. Geographic scale and site integrity

The White Shark Café consists of a large and well-delineated oligotrophic area in the centre of the sub-tropical gyre, centred between the Baja peninsula and the big island of Hawaii. The area thus acts as a functional unit and accordingly displays high site integrity.

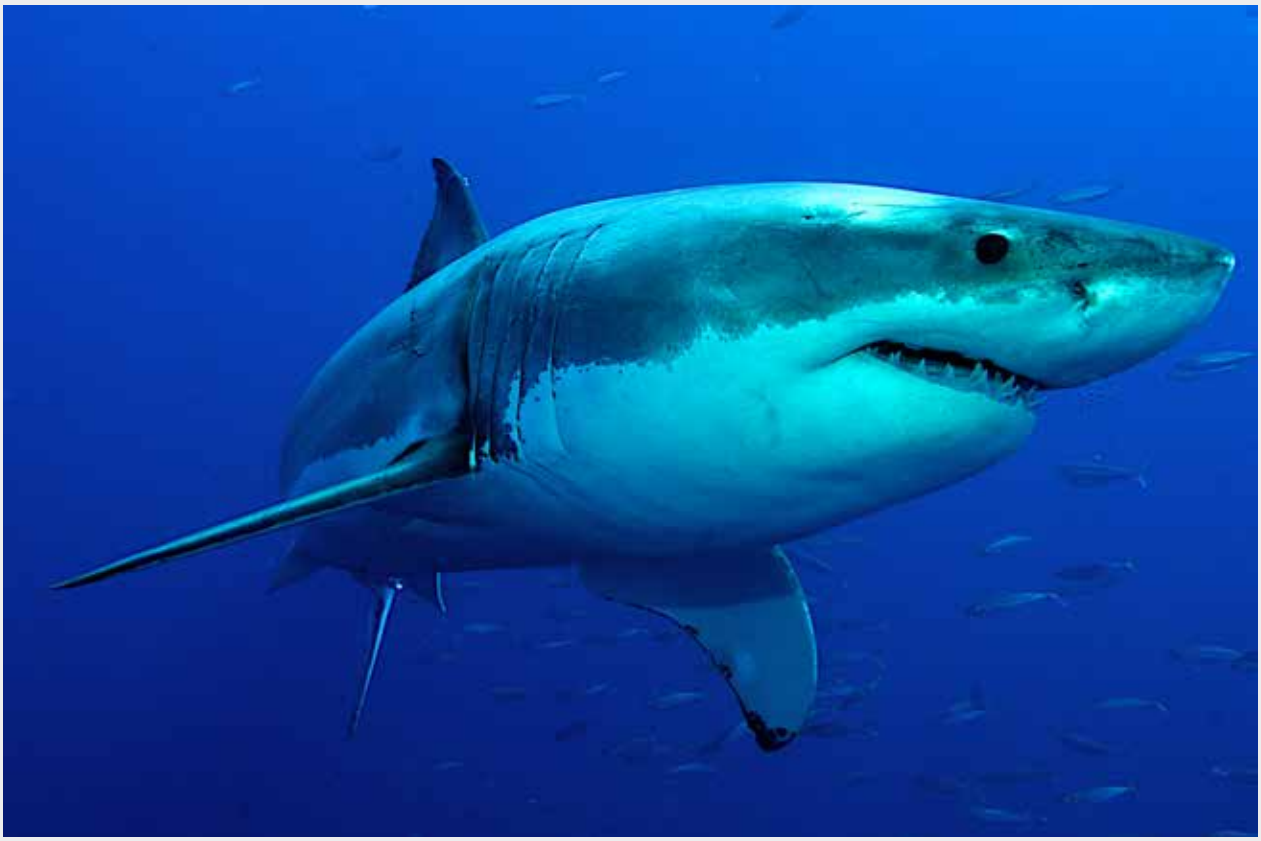
3.3. Protection and management

The Café has been identified as a candidate Ecologically or Biologically Significant Area (EBSA). There is currently no adequate protection in place for this site.

Great white shark at Isla Guadalupe, Mexico, August 2006.
Animal estimated at 11-12 feet (3.3 to 3.6 m) in length, age unknown.
© Pterantula (Terry Goss) via Wikimedia Commons



Site fidelity of satellite tagged white sharks from the central coast of California (n = 68) to three core areas in the north-eastern Pacific including the North American continental shelf waters, the waters surrounding the Hawaiian Island Archipelago and the white shark 'Café'. Yellow circles represent position estimates from light- and SST-based geolocations (Teo et al., 2004), and red circles indicate satellite tag endpoint positions (Argos transmissions), respectively.
Source: Jorgensen et al., 2010

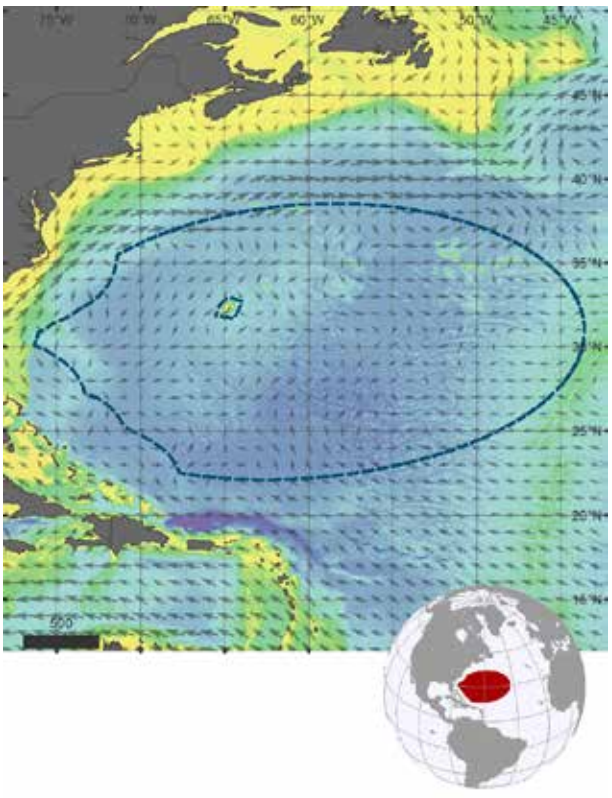


Great white shark posing in the deep blue water.
© Stefan Pircher/Shutterstock.com

The Sargasso Sea

1. Introduction

The 'Golden Floating Rainforest of the Ocean', the Sargasso Sea, is home to an iconic pelagic ecosystem built around the floating *Sargassum* seaweed, the world's only holopelagic algae.[22] Located within the North Atlantic sub-tropical gyre, it is the only sea without coasts, for only the islands of Bermuda lie within it. The floating *Sargassum* hosts a diverse community of associated organisms that include ten endemic species and it is the only breeding location for European and American eels.



The Sargasso Sea. Data: Bathymetry (GEBCO 2014) and surface currents (Lumpkin and Johnson 2013).

2. Threats

Despite its remote location, the Sargasso Sea faces anthropogenic threats. Fisheries' impacts and floating plastic impact the naturalness of the area as does shipping traffic and vessel discharges, as well as climate change.

22 Holopelagic algae are distinct from all other complex seaweeds in not having an attached benthic stage.

3. Potential Outstanding Universal Value

3.1. Potential justification of World Heritage Criteria

CRITERION VII – SUPERLATIVE NATURAL PHENOMENA OR NATURAL BEAUTY AND AESTHETIC IMPORTANCE

The Sargasso Sea is the only one of the world's five ocean gyres with a significant floating community based around *Sargassum* algae and a variety of oceanographic features and processes that influences the ecology and biology on a variety of spatial and temporal scales. The site is a globally outstanding natural phenomena and its floating golden *Sargassum* of exceptional aesthetic value.

CRITERION IX – SIGNIFICANT ECOLOGICAL AND BIOLOGICAL PROCESSES IN THE EVOLUTION OF ECOSYSTEMS, COMMUNITIES OF PLANT AND ANIMALS

The two species of floating *Sargassum* found in the Sargasso Sea are the world's only holopelagic macroalgae, and the Sea is home to numerous endemic species that are, by definition, rare.

CRITERION X – SIGNIFICANT BIOLOGICAL DIVERSITY AND THREATENED SPECIES OF OUV

Many of the species utilizing the Sargasso Sea are of global conservation significance, appearing on the IUCN Red List of Threatened Species, and/or under CITES, as well as in the annexes of the 1990 Protocol Concerning Specially Protected Areas and Wildlife Protocol (SPAW) of the Cartagena Convention.

3.2. Geographical scale and site integrity

The Sargasso Sea represents an entire ocean gyre system, surrounded by the Gulf Stream to the west, the North Atlantic Drift to the north, the more diffuse Canary Current to the east, and the North Equatorial Current and the Antilles Current to the south. The area acts as a functional unit and accordingly displays high site integrity.

3.3. Protection and management

In March 2014, representatives from five governments signed the Hamilton Declaration on Collaboration for the Conservation of the Sargasso Sea.[23] Pursuant to the Declaration, Bermuda established the Sargasso Sea Commission to exercise a stewardship role and to assist the signatory governments in developing proposals for conservation measures.

23 For more information: http://www.sargassoseacommission.org/storage/documents/Hamilton_Declaration_on_Collaboration_for_the_Conservation_of_the_Sargasso_Sea.with_signatures.pdf. (Accessed 21/04/2016)

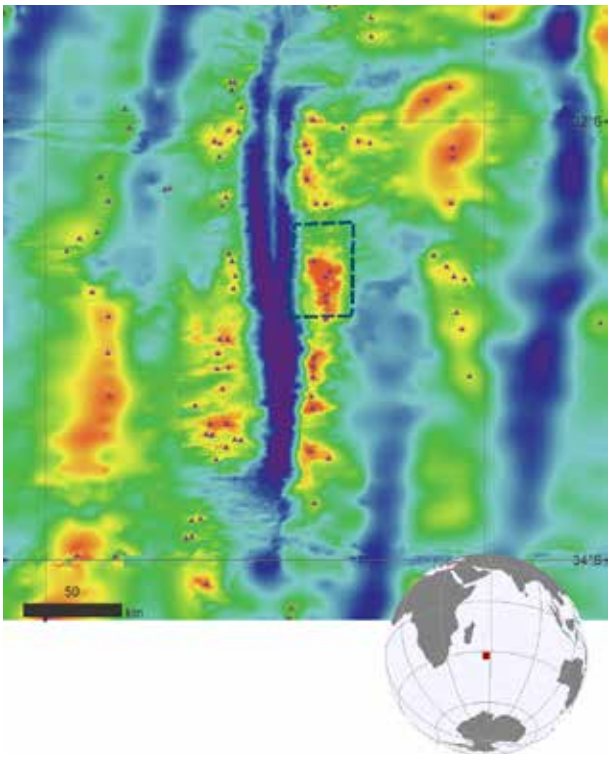
Loggerhead turtle hatchlings surrounded by *Sargassum* weed.

Humpback whale in the Sargasso Sea.

The Atlantis Bank

1. Introduction

The Atlantis Bank is a sunken tectonic fossil island, harbouring an extraordinary diverse deep-sea fauna. Located on the Southwest Indian Ridge, it has a unique paleontological record and was pivotal to understanding the geology of 'ultraslow' spreading seabed ridges. It is often considered a tectonic window providing one of the best places in the world for scientific study of Earth's geology. It is also of global value as it is a 'cold' or tectonic bank (rather than of more common volcanic origin – hence a bank and not a seamount), consisting of a sunken fossil island (guyot) of crustal origin. It was named after the mythical island of Atlantis because of its remarkable preservation of ancient island features. It has two fossil beaches, lagoons and a submerged headland. About two-thirds of the bank is covered with ripple marks identical to those in the sand on exposed beaches. These were 'frozen' or lithified as rock millions of years ago, as the island sank.



The Atlantis Bank. Data: Bathymetry (GEBCO 2014, Dick 1986) and seamounts (Yesson et al. 2011).

2. Threats

The complex topography of the Atlantis Seamount has protected it from past bottom-trawling activities, and thus is particularly important in preserving diverse seabed communities on the Southwest Indian Ridge in sub-tropical waters.

3. Potential Outstanding Universal Value

3.1. Potential justification of World Heritage Criteria

CRITERION VIII – MAJOR STAGES IN EARTH'S HISTORY AND GEOLOGICAL PROCESSES

The Atlantis Bank is a uniquely remarkable, tectonic feature created by uplift at the Southwest Indian Ridge and subsequent subsidence. While other examples may occur elsewhere, the Atlantis Bank is the most documented and studied example of this type of 'cold' or tectonically-formed feature.

CRITERION IX – SIGNIFICANT ECOLOGICAL AND BIOLOGICAL PROCESSES IN THE EVOLUTION OF ECOSYSTEMS, COMMUNITIES OF PLANT AND ANIMALS

The Atlantis Bank harbours an outstanding deep-sea fauna consisting of highly diverse and stunning coral gardens and complex sea-cliff deep-sea communities characterized by large anemones, armchair-sized sponges, glass sponges, octocorals, anemones and predatory sea spiders. Sharks and solitary corals at the summit include unknown species that are yet to be named by science.

CRITERION X – SIGNIFICANT BIOLOGICAL DIVERSITY AND THREATENED SPECIES OF OUV

The Bank is a true hotspot for biodiversity with a diversity of species of which some at the summit of the site include unknown species. The site is also of unique significance because of its high proportion of sensitive habitats, biotopes and species that are functionally fragile or with slow recovery.

3.2. Geographic scale and site integrity

The Atlantis Bank is a significant feature – rising up from over 5,000 metre deep, it has a top at 700 metre and comprises a complete system and rich diversity of habitats, ecosystems and species.

3.3. Protection and management

It is proposed as an Ecologically or Biologically Significant Area (EBSA) and has been declared a Benthic Protection Area (BPA) by the Southern Indian Ocean Deepwater Fishers Association (SIODFA).

Paragorgia, ~700m depth, Atlantis Seamount.

Diverse coral gardens and complex sea-cliff deep-sea communities characterized by large anemones, large sponges and octocorals at the Atlantis Bank, South West Indian Ocean.

Rock outcrops, particularly along the edges of the summit host large stylasterid colonies, with the echinoid *Dermechinus horridus*, at the Atlantis Bank, South West Indian Ocean.

PART III
Recognizing and protecting Outstanding Universal Value in the High Seas: how could it work in practice?

3

Signature of the World Heritage Convention by René Maheu, UNESCO Director-General, 23/11/1972.

1. Introduction

Deep-sea creature.

Part I of this publication examined the context for the preparation of this work and the recommendation of the UNESCO External auditor in 2011 that States Parties to the World Heritage Convention should 'reflect on the appropriate means to preserve sites that correspond to conditions of OUV which are not dependent upon the sovereignty of States Parties.'

Part II has looked in detail at the concept of OUV and identified a number of sites that illustrate the fact that there are likely to be a number of sites with potential OUV in ABNJ. It is not, nor is it intended to be, a comprehensive list. Those sites are merely illustrations and just a primer of how unique and truly exceptional some areas in ABJN are.

This Part explores the mechanisms by which the 1972 Convention Concerning the Protection of the World Cultural and Natural Heritage potentially could allow the inscription and protection of sites in ABNJ on the UNESCO World Heritage List. It does not recommend one preferred approach but does seek to explore briefly the arguments for and against each of a number of possible scenarios, recognizing that not all may be equally practicable. To appreciate the issues involved, it may be useful to first examine in detail the regime created by the Convention.

2. The World Heritage Convention text: an inclusive vision

Saving Abu Simbel.
© UNESCO

Abu Simbel.
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The final text of the Convention concerning the Protection of the World Cultural and Natural Heritage was adopted by the General Conference of UNESCO at its 17th Session in Paris, 16 November 1972.[24] It entered into force on 17 December 1975. As of March 2016 it has 191 Parties and is thus nearly universally ratified. [25]

Under the Convention, formal decision making is delegated to the World Heritage Committee -- a rotating committee of 21 States Parties that meets once every year. The Members are elected for four-year terms by all the Parties to the Convention.[26] The Committee is supported by the Secretariat of the Convention, the World Heritage Centre, which is based at UNESCO's headquarters in Paris.[27]

In addition to establishing rules of procedure, the Committee has also developed Operational Guidelines to help regularize its practice and to assist States Parties that wish to make nominations to understand what will be required of them.[28] It is important to note that these guidelines are statutory

24 (1972) 11 *International Legal Materials* 1358.

25 Cf. As of March 2016, the 1992 UN Framework Convention on Climate Change had 197 parties and the 1992 Convention on Conservation of Biological Diversity had 196 parties. The UN had 193 Member States.

26 Article 9.1 of the Convention foresees a six-year term for Committee Members, but there has been a voluntary reduction of members of the Committee of the term from 6 to 4 (see 13 GA9 and practice).

27 More information about the World Heritage Centre and the advisory bodies to the World Heritage Convention is available at: http://whc.unesco.org/en/world-heritage-centre/ and http://whc.unesco.org/en/advisorybodies/

28 *Operational Guidelines for the Implementation of the World Heritage Convention*, Intergovernmental Committee for the Protection of the World Cultural And Natural Heritage, UNESCO, WHC.15/01, 8 July 2015

administrative provisions that are designed to facilitate the implementation of the Convention. Paragraph 1.A of the Operational Guidelines makes it clear that they set out the procedures for, *inter alia*, the inscription of sites and will be 'periodically revised to reflect the decisions of the World Heritage Committee.' To this extent they clearly must not go beyond the text of the Convention itself, but it is always open to the Parties to any Convention to agree among themselves what the text of a Convention means in contemporary practice.

The overarching objectives of the Convention are set out in the Preamble, which for purposes of interpretation constitutes a part of the text of the Convention.[29] The unique and uncompromising vision of the original drafters is to prevent the loss of the world's cultural and natural heritage. After recalling that UNESCO has been mandated by its Constitution to maintain, increase and diffuse knowledge by assuring the conservation and protection of the world's heritage, it goes on to recognize that 'parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the *world heritage of mankind as a whole.*' It highlights the fact that existing international instruments 'demonstrate the importance, for all the peoples of the world, of safeguarding this unique and irreplaceable property, '*to whatever people it may belong*.' It stresses the need for a convention 'establishing an effective system of collective protection of the cultural and natural heritage of outstanding universal value, organized on a permanent basis and in accordance with modern scientific methods.'

Nothing in this inspirational vision suggests that natural or cultural heritage of OUV which is located in marine ABNJ should be excluded from this protection. Indeed, it would be strange if more or less half of the world were to be excluded from what is indicated as 'world heritage'. As defined by the 1982 United Nations Convention on the Law of the Sea, the seabed 'Area' (as well as its resources) beyond national jurisdiction are the *common heritage of mankind* [30] and the water column above this and beyond the 200 nm exclusive economic zones of coastal states is the high seas – waters that are open to all and that may not be subjected to the sovereignty of any state – *the global commons*. [31]

The Vienna Convention on the Law of Treaties provides that a special meaning shall be given to any term used in a treaty if it is established that the Parties so intended.[32] This is particularly relevant to the interpretation of Articles 1 and 2 of the World Heritage Convention that define natural [33] and cultural [34] heritage respectively. Neither term is defined in ways that restricts its application to areas within the national territory of its Parties.

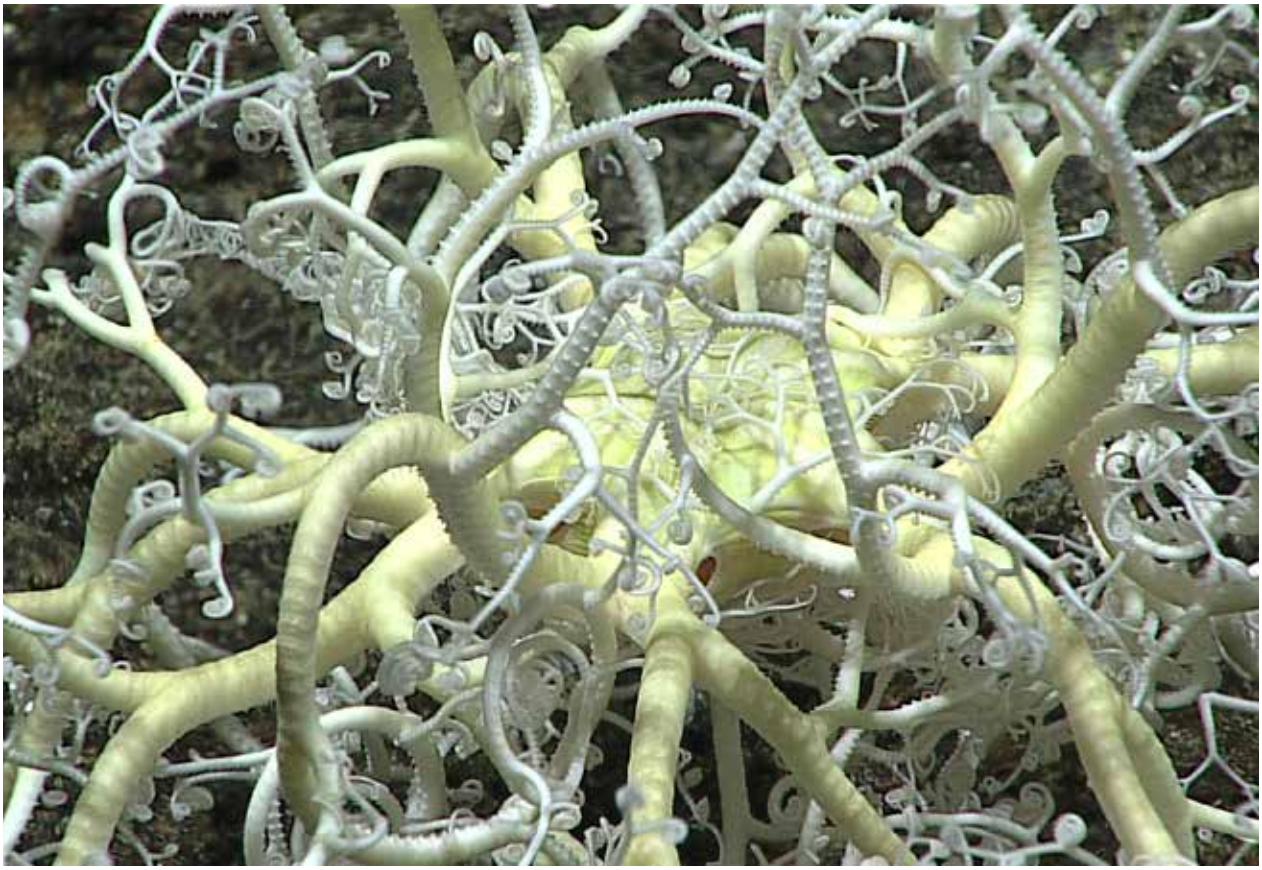
A rare observation of an aplacophoran (shell-less mollusk) feeding on a bamboo coral.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2015 Hohonu Moana.

"Nothing in this inspirational vision suggests that natural or cultural heritage of OUV which is located in marine ABNJ should be excluded from this protection."

29 Article 31(2), 1969, Vienna Convention on the Law of Treaties, 1155 *United Nations Treaty Series [UNTS]* 331.
30 Art 136, 1982 UN Convention on the Law of the Sea, 1833 *UNTS* 396 (UNCLOS).
31 Arts 87 and 89, UNCLOS.
32 Art 31(4), Vienna Convention on the Law of Treaties.

33 Article 1: For the purpose of this Convention, the following shall be considered as "cultural heritage":
– monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
– groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
– sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.
34 Article 2: For the purposes of this Convention, the following shall be considered as "natural heritage":
– natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;
– geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;
– natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

3. Provisions for nominating World Heritage sites



Close up of a basket star, with commensal ophiuroids.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2016 Deepwater Exploration of the Marianas.

Despite the inclusive vision of the World Heritage Convention, however, there are a number of other provisions in the Convention, particularly related to the process of nomination of possible sites that appear to restrict the nomination of sites to those which are 'situated on the territory' of any of its States Parties.

For example, Article 3 provides that 'It is for each State Party to this Convention to identify and delineate the different properties situated on its territory mentioned in Articles 1 and 2 above.' Article 4 provides that 'Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State.' Indeed, the very process for inscription of World Heritage sites under Article 11 requires that each State Party initially submit an inventory of property 'situated in its territory and suitable for inclusion in the list.' These properties are then assessed by the World Heritage Committee for their OUV before they are eligible for inscription.

The text of the Convention therefore reflects what was seen by the drafters in the 1970s as the appropriate processes for assessing the overwhelming majority of cultural and natural heritage sites of OUV that are located within national borders. At that time of course, there was no widespread knowledge, or understanding, of the significance of many ecosystems far from land and deep beneath the ocean. For example, hydrothermal vents with extremophile chemical-based life forms were only discovered in the late 1970s. The United Nations Law of the Sea Convention was finalized in 1982, a decade after the World Heritage Convention.

For the interpretation of the Convention text, however, it is important to note that although it lays down these procedures, nowhere does it say that other procedures may not be developed to secure and safeguard sites. For example, Article 11(3) requires simply the consent of the 'State concerned' for the inclusion of a property in the World Heritage list. It does not require that it be the State in whose territory the property is situated that makes the nomination.

So although the protection of marine sites in ABNJ may not have been provided with an obvious means of recognition by the original drafters of the Convention, it cannot be said that as a matter of legal interpretation to be beyond the 'objects and purposes' of the original design of the Convention. It is well known that treaty regimes evolve over time as does the wider legal context in which they operate. As Francioni has said in his definitive study of the Convention: '*In the thirty five years that have passed since the adoption of the World Heritage Convention, international law has undergone profound transformation*.' New concepts and principles have emerged which place great emphasis on the idea of 'international public goods', common interest of humanity and 'common concern.'[35]

He further states that '*The dynamic character of international law in the areas of natural and cultural heritage … has facilitated the development of interpretative criteria that permit the adaptation of existing law to new realities and risks*.' [36] It is in this context that it is always open to the States Parties to the Convention among themselves to determine the contemporary meaning of the Convention. The Operational Guidelines, discussed above, which are agreed by the World Heritage Committee, could be seen as a way in which an innovative approach to the interpretation of the Convention could be introduced. Although it should be cautioned that such an approach is not likely to be entirely free from controversy (see below).

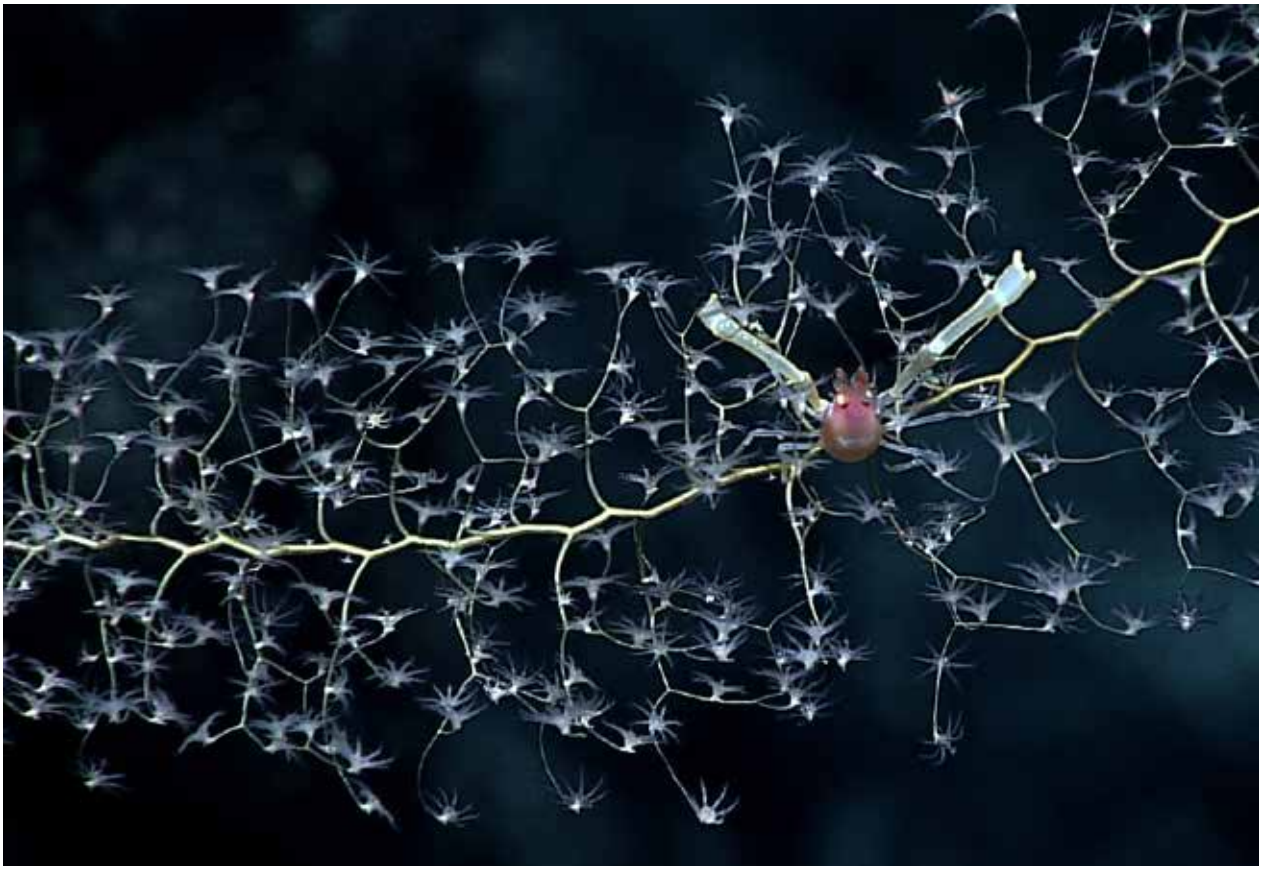
Of course if the States Parties were to consider exploring how sites in marine ANBJ might be inscribed, then the way in which such a new procedure would work could benefit from wider discussion.

Hoplostethus crassispinus, in the same genus as, and related to the Orange Roughy but lives a somewhat solitary existence.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2015 Hohonu Moana.

"Hydrothermal vents with extremophile chemical-based life forms were only discovered in the late 1970s. The United Nations Law of the Sea Convention was finalized in 1982"

35 Francioni F. and Lenzerini F., *The 1972 World Heritage Convention: A Commentary* (Oxford University Press, 2008) p. 6
36 *Ibid.*

4. Possible options for applying Outstanding Universal Value in the High Seas



Squat lobsters are common associates on deep-sea corals, like this one observed at Guyot Ridge.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2015 Hohonu Moana.

4.1. Introduction

Allowing the World Heritage Convention to cover protection of unique marine areas beyond national jurisdiction does not require any change in the definitions of natural and cultural heritage. They would remain the same. The central question however is: *how could the necessary procedural changes be made that would allow inscription and protection of World Heritage site in areas beyond national jurisdiction?*

The following sections consider a series of possible scenarios that could be feasible. Each briefly explains one scenario and outlines some of the key arguments for and against. It is not the task of this publication to make any recommendation as to which might be the best approach – that would be for the governing bodies and Parties to the Convention to decide.

Of course, the Convention itself does provide for amendment of the text.[37] The procedures for this are laid down in the relevant UNESCO rules of procedure.[38] However, for a variety of reasons, such an approach is not a viable option."

37 Article 37(1) provides: 'This Convention may be revised by the General Conference of the United Nations Educational, Scientific and Cultural Organization. Any such revision shall, however, bind only the States which shall become Parties to the revising convention.'

38 The Rules of Procedure concerning recommendations to Member States and international conventions covered by the terms of Article IV, paragraph 4, of the Constitution. Adopted by the General Conference at its 5th session, and amended at its 7th, 17th, 25th, 32nd and 35th sessions. The revision procedure entails an examination by the Executive Board and by the General Conference (GC). In addition, a 'special Committee' (usually a category 2 meeting) consisting of representatives of Member States may be convened. Section 3.3 (Rules of Procedure) provides that the whole text of the revision could be open for revision, although the decision on the extent of the proposed revision would be taken by the Member States (the Executive Board and GC).

4.2. A 'bold' interpretation of the 1972 World Heritage Convention

From a procedural point of view the simplest way to broaden the implementation of a Convention is for the Parties to take an expansive or dynamic view of their competences. This is what Francioni has called a '*bold interpretation*.'[39]

As discussed above, at the practical level the World Heritage Committee could amend the Operational Guidelines so as to add a process for designation of sites in ABNJ. The Operational Guidelines provide the basis for the daily implementation of the Convention and are established by the 21 members of the World Heritage Committee, which is established in the Convention as the principal governing body for the operation of the Convention, including the criteria to be adopted that define OUV. While the guidelines cannot go beyond the Convention – it is for the Parties themselves to decide what the Convention means in a contemporary context.

There are two levels at which these "bold" operational decisions could be taken, incrementally or by a major policy change:

4.2.1. Incremental changes

The Parties to any agreement can incrementally and pragmatically agree to minor changes in the way that they interpret or apply a treaty. In this case pragmatic decisions on interpretation of the Convention can be taken at an operational level.

The World Heritage Committee has already made a number of such decisions that have adapted the criteria over time. A prime example in the marine sphere would be the way the Committee has already inscribed sites which include areas beyond the territorial sea of coastal states.[40]

Another example is the inclusion of 'cultural landscapes' within the categories of sites in the Operational Guidelines, which define these as 'cultural properties' that represent the 'combined works of nature and man.' These are not specifically mentioned in the definitions of Articles 1 and 2 of the Convention, but the Guidelines have interpreted those definitions by clearly defining 'Mixed properties' in paragraph 46 and "Cultural Landscapes" in paragraph 47.

The advantage of such an incremental approach is that changes can be made by the World Heritage Committee by its own decision making processes and if necessary by the amendment of the Guidelines. However a possible disadvantage is that this could be slow. In other words, the World Heritage Committee may feel it needs to take a series of decisions making incremental changes to the Guidelines rather than adopt a wholesale policy change (discussed below). Moreover, there is a risk that extending inscription to sites in marine ABNJ may not be a type of decision that all States would consider as purely "operational" in nature.

4.2.2. A formal policy change

A second approach that can be taken by the Parties to any Agreement is that they can agree to, and formally announce, a change in the way that they intend to interpret and apply a treaty in the future.[41] For example in 2004, to avoid renegotiating their constitutive treaty, the Parties to the 1982 Convention on Future Multilateral Co-operation in the Northeast Atlantic Fisheries approved a 'London Declaration on the Interpretation and Implementation of the Convention.' By this Declaration, they agreed to incorporate the post-1992 global agreements and instruments into their own regime, including the precautionary and ecosystem approach and then to regard themselves as bound by them.[42]

In this case, it is possible that the World Heritage Committee (or the States Parties as a whole) could make a major policy decision amending the Guidelines so as to contemplate the inscription of marine sites in ABNJ, and prescribing the consequential procedural changes that would be made to facilitate this.

The advantage of such an approach would be that the changes could be made by a decision of the World Heritage Committee (or States Parties) and the changes would have immediate effect. The disadvantages could include the following risks: that the negotiation of the exact wording of the text of the proposed changes might be as long and complex as a treaty negotiation, during which time the composition of the World Heritage Committee would be constantly changing; also that other States Parties to the Convention might challenge the power of the World Heritage Committee to take such a major step by itself.

39 Per Francioni Interview September 2015– although these are not his examples.

40 The Phoenix Island Protected Area in Kiribati (2010) and the Papahānaumokuākea Marine National Monument (2010) in the US Hawai'ian islands have both been inscribed as WH sites. The outer limits of both sites extend beyond the territorial sea of Kiribati and the US respectively. Under the terms of Article 2(1) of the 1982 UNCLOS – taken to reflect customary international law – "The sovereignty of a coastal State extends, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea." Beyond that zone however, in its exclusive economic zone, a coastal state only has "sovereign rights" over the resources of the seabed and water column (Art 55, UNCLOS). Although of course, as a matter of international law, the coastal State does have jurisdiction over the protection of the marine environment of its EEZ – giving it the ability to protect WH sites.

41 Indeed, the Vienna Convention even countenances two or more parties to agreement modifying that agreement only *inter se*, as long as it does not adversely affect other parties and is not contrary to the object and purposes of the agreement (Art 41(1)).

42 See Freestone, D. 2010. Fisheries, Commissions and Organizations, in *Max Plank Encyclopedia of Public International Law,* Oxford, OUP, p. 5.

4.3. Amendment outside the terms of the 1972 World Heritage Convention

More radical would be an approach similar to that taken by the United Nations to avoid invoking the complex amendment procedures of the 1982 United Nations Convention on the Law of the Sea (UNCLOS).[43] In 1990, UNCLOS had still not come into force because of objections from some developed countries to the seabed mining regime in Part XI of UNCLOS. The United Nations Secretary-General in July 1990 started a series of informal consultations that ultimately resulted in the negotiation of a new text of Part XI. That new text became the 1994 Implementation Agreement. It was presented to the UNGA and approved by Resolution.[44] The Agreement was then opened for signature and ratification the next day. States that became party to UNCLOS after that date were deemed to have agreed to the 1994 Implementing Agreement also.[45]

In this context it might be open to some or all of the States Parties to the World Heritage Convention to agree among themselves to change – or 'to modify' in the wording of the Vienna Convention on the Law of Treaties – the regime of the 1972 Convention so as to contemplate the inscription of marine sites in ABNJ, and to prescribe the consequential procedural changes that would be made to facilitate this. This would effectively be a new treaty regime parallel to the 1972 Convention.

This may be a more theoretical approach, but the advantage of this approach is that it would avoid the formal amendment procedures of the 1972 Convention, but would require a very high level of consensus and political will among a substantial number of the States Parties to achieve the desired end, without a long and potentially divisive negotiation. Moreover, the modification would only be effective between the states that had agreed to it, causing some potential implementation complexities.

4.4. An optional protocol to the 1972 World Heritage Convention

Another approach would be the negotiation of an optional protocol to the 1972 Convention relating to the inscription of sites in marine ABNJ. The 1972 Convention does not specifically contemplate the conclusion of a protocol, but neither does it say it cannot be done.[46] The UNESCO procedures for new instruments, outlined above, would require that a proposal for such a protocol would include a preliminary study of the technical and legal aspects of the problem under consideration, and examination of this by the UNESCO Executive Board.

The negotiation of a protocol would involve an international negotiation, to which all the States Parties would need to be invited. However, because it would not be an amendment to the Convention, but an addition in order to reflect and implement the full scope of its preamble, it has the advantage that it need not involve all States Parties to the 1972 Convention that are not interested in such a development. As a protocol to the 1972 Convention, it would only be open for signature to States Parties to the 1972 Convention and would be a parallel text which expands the ambit of the Convention without detracting from its existing achievements. Such a process would have the advantage that the negotiators could re-examine the most appropriate nomination and inscription procedures for ABNJ sites as well as further develop the 'system of international cooperation and assistance designed to support States Parties to the Convention in their efforts to conserve and identify that heritage' as envisaged by Article 7 of the Convention.

43 See Freestone, D. and Oude Elferink, A. G., Flexibility and innovation in the law of the sea: will the LOS Convention amendment procedures ever be used? in A. G. Oude Elferink (ed.). 2005. *Stability and Change in the Law of the Sea: The Role of the LOS Convention* pp. 163-216, 184-86.

44 UNGA Res. 48/263 (28 July 1994) approved with 121 for, 0 against and 7 abstentions.

45 Article 4(1), 1994. Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea, 28 July 1994. (1995) 33 *International Legal Materials* 1309.

46 There is a recent analogy with the negotiation process of the 1999 Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict. For a definitive study of the negotiation of the Protocol, see Toman, J. 2009. *Cultural Property in War: Improvement in Protection,* Paris, UNESCO.

5. Management and protection of Outstanding Universal Value in the High Seas

A remotely operated vehicle (ROV) is brought back on board after a dive deep into the Canada Basin.
Image courtesy of the NOAA Office of Ocean Exploration and Research, 2005 Hidden Ocean Expedition

Inscription of a site on the World Heritage List is but a first step. Central to the Convention are its mechanisms to monitor the state of conservation of the OUV of sites and assist countries to secure their long term protection. Therefore, apart from the issues related to nomination and inscription of World Heritage sites in marine ABNJ, a central question relates to the protection of their OUV once they are recognized. Below are some preliminary reflections on this issue.

Although currently existing management measures in ABNJ are largely sectoral and rather fragmented, these areas are not totally ungoverned.[47] There is a relatively large range of specialist organizations whose specific tasks include coordinating member states' management of human activities in ABNJ over which they have jurisdiction. Although the organizations do not have specific mandates to protect natural or cultural heritage, under particular agreements member states do have some obligations regarding the conservation and management of resources in ABNJ. For example, the ISA is the organization 'through which States Parties shall . . . organize and control activities in the Area, particularly with a view to administering resources . . .' in accordance with Part XI.[48]

UNCLOS also provides that activities '*be carried out for the benefit of mankind as a whole, irrespective of the*

47 See Freestone, D. 2016. Governance of areas beyond national jurisdiction: an unfinished agenda? in *The UN Convention on the Law of the Sea: A Living Treaty?* London, British Institute of International and Comparative Law, pp. 231-66.

48 Article 157 UNCLOS

geographical location of states…';[49] the International Maritime Organization (IMO) which coordinates the Member States' regulation of international vessel traffic, safety and vessel source pollution in the marine environment including the ABNJ; the Food and Agriculture Organization of the United Nations (FAO) and the wide range of RFMOs are the organizations in which member states coordinate the conservation and management of fisheries' resources in ABNJ. The effectiveness of these organizations largely depends on flag state and port state enforcement. Regulatory measures are developed by the organizations but compliance with these measures is primarily the responsibility of the Members States themselves, either individually or jointly.

States may exercise jurisdiction over activities in ABNJ when those activities are conducted by vessels flying their flag or by persons or legal entities – such as companies – which hold their nationality. They may not, however, exercise jurisdiction over vessels flying the flag of other nations or over foreign nationals unless those other nations have agreed, usually by treaty, to allow reciprocal enforcement. So that, for example, the member states of a RFMO can agree to recognize the authority of the coast guard or navy vessels of other Member States to enforce the legally binding conservation measures of the RFMO against their own vessels.[50] Port states may also inspect foreign vessels calling into their ports to ensure that they are in compliance with international agreements to which the flag state is party.[51]

The International Tribunal for the Law of the Sea (ITLOS) has reinforced the legal duties that a flag state has to supervise closely the activities of its vessels, nationals and those acting under its authority. In a groundbreaking Advisory Opinion of 2011 rendered at the request of the ISA, the Seabed Disputes Chamber of ITLOS found that states that sponsor activities relating to exploration and exploitation of the deep seabed – i.e. in ABNJ – are under the highest duty of due diligence to ensure that the entities they sponsor comply with the best possible environmental practices. [52] This duty cannot be avoided.

Building on that Opinion, in 2015 the full Tribunal examined the obligations of states in relation to fishing vessels flying their flags.[53] The Tribunal ruled that 'the flag State, in fulfilment of its responsibility to exercise effective jurisdiction and control in administrative matters, must adopt the necessary administrative measures to ensure that fishing vessels flying its flag are not involved in activities which will undermine the flag State's responsibilities under the Convention in respect of the conservation and management of marine living resources.'[54]

The Tribunal also reminded us that it had already found in a previous case that a flag state's obligation under Art 192 of UNCLOS to 'protect and preserve the marine environment' includes 'conservation of the living resources of the sea.'[55] Therefore flag states are obliged to take the necessary measures to ensure that their nationals and vessels flying their flag are not involved in IUU fishing activities in the EEZ of another state.[56] Although this Opinion only related to the EEZ, the same principles would be applicable on the High Seas.

These examples are intended to illustrate that it is quite feasible for the Member States of the 1972 World Heritage Convention to agree among themselves a regime for the protection of inscribed sites in marine ABNJ. The chosen regime would focus on the protection of those flagship marine areas that are recognized for their OUV and as such are inscribed on the UNESCO World Heritage List. They can also agree to collaborate with existing international sectoral organizations with relevant competences. For example, the International Seabed Authority in relation to a seabed site in the Area[57] or an RFMO in relation to a high seas site recognized for its fish species aggregations of OUV. In this regard, the mechanisms developed by the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage are of particular interest and provide a useful precedent.[58]

The 2001 Convention provides a collaborative regime among Member States for the protection of underwater cultural heritage (UCH) in the Area – i.e. in ABNJ – which involves UNESCO and the International Seabed Authority.[59] Under Articles 11 and 12, all States Parties have a responsibility to protect UCH in the Area[60] and also have obligations to ensure that their nationals – or the masters of ships flying

49 Article 140(1) UNCLOS.

50 See for example under Article 21, 1995 United Nations Fish Stocks Agreement (1995) 34 *International Legal Materials* 1542; there are also examples of reciprocal High Seas boarding inspection schemes under the Western Central Pacific Fisheries Commission and South Pacific Regional Fisheries Management Organization.

51 There is a network of 'Memoranda of Understanding' (MOUs) between the port states of each region of the oceans where the States of the region each undertake to inspect a certain percentage of vessels visiting their ports to ensure they comply with international obligations agreed by the IMO regarding ship safety, pollution control, etc. The 2009 Agreement on Part State Measures to Prevent, Deter and Eliminate Illegal Unreported and Unregulated Fishing (Port State Measures Agreement) negotiated under the auspices of the FAO recognizes *inter alia* port state rights to inspect vessels suspected of IUU fishing (in force 2016). At http://www.fao.org/fishery/psm/agreement/en

52 *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, Case No. 17, Advisory Opinion (ITLOS Seabed Disputes Chamber Feb. 1, 2011), *at* http://www.itlos.org/

53 *Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC),* Case 21, International Tribunal for the Law of the Sea (ITLOS), 2 April 2015. At http://www.itlos.org/

54 Advisory Opinion (AO), Para 119

55 *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Provisional Measures*, Order of 27 August, 1999, ITLOS Reports 1999, 280, at p. 295, para. 70.

56 XXX

57 Article 1(1) UNCLOS reads: '"Area" means the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction.'

58 UNESCO (2001) Convention on the Protection of the Underwater Cultural Heritage adopted by the General Conference at its 31st session, Paris, 2 November 2001. 48 *Law of the Sea Bulletin* 29 (in force 2 January 2009). Text at http://unesdoc.unesco.org/images/0012/001246/124687e.pdf#page=56

59 See Dromgoole, S. 2013. *Underwater Cultural Heritage and International Law*, Cambridge (UK), CUP, pp. 294-98.

60 This is consistent with framework of the UNCLOS, particularly Articles 149 and 303(1).

their flags - report to it any discovery of UCH or any intention 'to engage in activities directed at underwater cultural heritage located in the Area.'[61] The State Party then reports these activities to both the Director-General of UNESCO and the Secretary-General of the ISA. The Director-General then makes this information available to all States Parties so that they may declare an interest in the UCH in the Area. Interested states then collaborate on how to best protect the UCH, and appoint a 'Coordinating State' to implement or organize agreed protection measures in consultation with the ISA if it accepted the invitation of the Director-General. It is recognized that any and all Member States have the authority to take 'all practicable measures in conformity with the Convention … to prevent any immediate danger to the [UCH], whether arising from human activities or any other cause including looting' [62] prior to the selection of the Coordinating State and protective measures to be implemented through authorization system. In coordinating consultations, taking measures, conducting preliminary research, and/or issuing authorizations, the Coordinating State shall act for the benefit of humanity as a whole, on behalf of all States Parties.[63]

A central force of the 1972 Convention is its capacity to call upon the international community to safeguard a site when its unique values are severely threatened by inscribing the site on the List of World Heritage in Danger or by stripping a site of its World Heritage status when its OUV is irrevocably lost. In particular, the risk of potential listing of a site 'in Danger' has proved highly effective in the form of an 'alert system' that ensures the necessary attention of the international community to put the necessary measures in place that will secure the preservation of a site's unique values. Numerous examples exist where such an alarm has prevented an irrevocable loss of a unique and irreplaceable part of our world heritage.

"A central force of the 1972 Convention is its capacity to call upon the international community to safeguard a site when its unique values are severely threatened…"

61 Article 11(1) 2001 Convention
62 Article 12(3) 2001 Convention
63 Consistent with UNCLOS Article 149, particular regard shall be paid to the preferential rights of States of cultural, historical or archaeological origin in respect of the underwater cultural heritage concerned.

6. Concluding remarks

Divers make an underwater star.
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Nothing in the inspirational vision of the 1972 World Heritage Convention suggests that nature or culture heritage of OUV which is located in marine ABNJ should be excluded from this protection. Indeed, it would be strange if more or less half of the world were to be excluded from what is indicated as 'World Heritage'.

In summary, there are three potentially feasible scenarios for the application of the 1972 Convention to include World Heritage sites in ABNJ:

1) Bold interpretation of the Convention, either through incremental change or a formal policy change;

2) Amendment outside the terms of the 1972 Agreement akin to the 1994 Part XI Implementing Agreement to UNCLOS; and

3) An optional protocol to the 1972 Convention developed through an international negotiation among States Parties, binding only on those States that choose to ratify any resulting protocol.

Under any scenario, a system for the protection of World Heritage sites in areas beyond national jurisdiction will need to be elaborated, both in conjunction with the relevant competent international organizations and their States Parties, and in coordination with potential procedures for marine protected areas developed for the conservation and sustainable use of marine biodiversity in ABNJ pursuant to any new international instrument under UNCLOS.

The criteria for defining the OUV of potential World Heritage sites go beyond biodiversity to include, for example, 'geological and physiographical formations' and sites of historic, archaeological or cultural value. So the discussions within the United Nations in New York of a new agreement under UNCLOS would not supersede the need for discussions within the framework of the World Heritage Convention.

4

PART IV: ANNEXES

A juvenile of a sawtooth eel, *Serrivomer* sp. (Serrivomeridae).

ANNEX I:

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PART I Outstanding Universal Value in the High Seas: why does it matter?

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ANNEX II:

Expert Working Meeting, 29-30 October 2015: agenda and participants

AGENDA WORLD HERITAGE HIGH SEAS EXPERT MEETING

UNESCO HQ, Paris, 29-30 October 2015
Meeting room 4.021 (main building)

Purpose: Development of an assessment of the potential to apply the concept of Outstanding Universal Value to areas beyond national jurisdiction

Thursday 29 October : Day 1	
8.30 – 9.00	**Arrival of participants** Map to venue – 7 Place Fontenoy, 75007 Paris, France
9.00 – 9.30	**General Introduction:** Development of an assessment of the potential to apply the concept of Outstanding Universal Value (OUV) to areas beyond national jurisdiction: – Scope of the project – Objectives of the meeting – Expected outcomes and results *Dr. Fanny Douvere, Coordinator, Marine Programme, World Heritage Centre, UNESCO*
9.30 – 9.45	**Message from the Partner** *Mr. Philip Renaud, CEO Khaled bin Sultan Living Oceans Foundation*
9.45 – 10.15	**Understanding Outstanding Universal Value: Nomination, inscription and evaluation of sites on the UNESCO World Heritage List** What is OUV ? Example : Assessing Marine World Heritage from an Ecosystem Perspective: The Western Indian Ocean Comparative analysis *Dr. David Obura, Director CORDIO East Africa*
10.15 – 10.30	**Presentation of the preliminary baseline assessment: Outstanding Universal Value in areas beyond national jurisdiction** *Dr David Freestone, Lead Consultant, World Heritage High Seas project* *Dr. Dan Laffoley, IUCN Vice-Chair Marine, World Commission on Protected Areas*
10.30 – 10.45	Coffee break
10.45 – 12.45	**PART I: SELECT POSSIBLE WORLD HERITAGE SITES IN AREAS BEYOND NATIONAL JURISDICTION** Parameters for site selection and outcomes: preliminary baseline assessment *Moderator: Dr. Dan Laffoley, IUCN Vice-Chair Marine, World Commission on Protected Areas*
12.45 – 14.00	Lunch
14.00 – 15.30	Discussion Part I (continued)
15.30 – 16.00	Coffee break
16.00 – 17.45	DISCUSSION PART I (CONTINUED)
17.45 – 18.00	**Wrap up Day 1 + introduction Day 2** *Dr Fanny Douvere, Coordinator, Marine Programme, World Heritage Centre, UNESCO*
20.00	Dinner

Impressions from the Expert Working Meeting.
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Friday 30 October : Day 2	
9.00 - 10.30	**PART II: POSSIBLE LEGAL AND POLICY MECHANISMS FOR APPLICATION OF THE WORLD HERITAGE CONVENTION IN HIGH SEAS** Possible alternative policy/legal mechanism for application of the 1972 World Heritage Convention to areas beyond national jurisdiction and discussion *Moderator: Dr. David Freestone, Lead Consultant World Heritage High Seas project*
10.30 – 10.45	Coffee Break
10.45 – 12.45	Discussion Part II (continued)
12.45 – 13.00	Lunch
13.00 – 15.30	**PART II: (CONCLUDING SESSION)** Selection of core group of possible World Heritage sites in areas beyond national jurisdiction *Moderator: Dr. Dan Laffoley, IUCN Vice-Chair Marine, World Commission on Protected Areas*
15.30 – 16.00	Coffee break
16.00 – 17.00	**Consolidation of action needed on draft materials and next steps** *Lead: Dr. David Freestone and Dr. Dan Laffoley*
17.00 – 17.30	**Concluding remarks and closing of the meeting** *Dr. Fanny Douvere, Coordinator, Marine Programme, World Heritage Centre, UNESCO*

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ANNEX III

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Managing Tourism at World Heritage Sites: a Practical Manual for World Heritage Site Managers
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(In English) November 2002; (In Spanish) May 2005

World Heritage **papers** 2

Investing in World Heritage: Past Achievements, Future Ambitions
(In English) December 2002

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