

Cultural and spiritual significance of nature

Guidance for protected and conserved area governance and management

Bas Verschuuren, Josep-Maria Mallarach, Edwin Bernbaum, Jeremy Spoon, Steve Brown, Radhika Borde, Jessica Brown, Mark Calamia, Nora Mitchell, Mark Infield, Emma Lee

Craig Groves, Series Editor

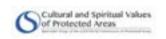


Developing capacity for a protected planet

Best Practice Protected Areas Guidelines Series No. 32













IUCN WCPA'S BEST PRACTICE PROTECTED AREA GUIDELINES SERIES

IUCN-WCPA's Best Practice Protected Area Guidelines are the world's authoritative resource for protected area managers. Involving collaboration among specialist practitioners dedicated to supporting better implementation of ideas in the field, the Guidelines distil learning and advice drawn from across IUCN. Applied in the field, they build institutional and individual capacity to manage protected area systems effectively, equitably and sustainably, and to cope with the myriad of challenges faced in practice. The Guidelines also assist national governments, protected area agencies, non-governmental organisations, communities and private sector partners in meeting their commitments and goals, and especially the Convention on Biological Diversity's Programme of Work on Protected Areas.

A full set of guidelines is available at: www.iucn.org/pa_guidelines

Complementary resources are available at: www.cbd.int/protected/tools/

Contribute to developing capacity for a Protected Planet at: www.protectedplanet.net/

IUCN PROTECTED AREA DEFINITION, MANAGEMENT CATEGORIES AND GOVERNANCE TYPES

IUCN defines a protected area as:

A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

la Strict nature reserve: Strictly protected for biodiversity and also possibly geological/ geomorphological features, where human visitation, use and impacts are controlled and limited to ensure protection of the conservation values.

Ib Wilderness area: Usually large unmodified or slightly modified areas, retaining their natural character and influence, without permanent or significant human habitation, protected and managed to preserve their natural condition.

Il National park: Large natural or near-natural areas protecting large-scale ecological processes with characteristic species and ecosystems that also have environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.

III Natural monument or feature: Areas set aside to protect a specific natural monument that can be a landform, seamount, marine cavern, geological feature such as a cave, or a living feature such as an ancient grove.

IV Habitat/species management area: Areas to protect particular species or habitats, where management reflects this priority. Many will need regular, active interventions to meet the needs of particular species or habitats, but this is not a requirement of the category.

V Protected landscape or seascape: Where the interaction of people and nature over time has produced a distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

VI Protected areas with sustainable use of natural resources: Areas that conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims.

The category should be based around the primary management objective(s) that should apply to at least three-quarters of the protected area – the 75% rule.

The management categories are applied with a typology of governance types – a description of who holds authority and responsibility for the protected area. IUCN defines four governance types.

Type A. Governance by government: Federal or national ministry/agency in charge; sub-national ministry or agency in charge (e.g. at regional, provincial, municipal level); government-delegated management (e.g. to NGO).

Type B. Shared governance: Trans-boundary governance (formal and informal arrangements between two or more countries); collaborative governance (through various ways in which diverse actors and institutions work together); joint governance (pluralist board or other multi-party governing body).

Type C. Private governance: Conserved areas established and run by individual landowners; non-profit organisations (e.g. NGOs, universities) and for-profit organisations (e.g. corporate landowners).

Type D. Governance by Indigenous peoples and local communities: Indigenous peoples' conserved areas and territories - established and run by Indigenous peoples; community conserved areas – established and run by local communities.

For more information on the IUCN definition, categories and governance types see Dudley (2008). *Guidelines for applying protected area management categories*, which can be downloaded at: www.iucn.org/pa_categories

For more information on governance types, see Borrini-Feyerabend, et al., (2013). *Governance of Protected Areas: From understanding to action*, which can be downloaded at https://portals.iucn.org/library/node/29138

Cultural and spiritual significance of nature

Guidance for protected and conserved area governance and management





IUCN (International Union for Conservation of Nature)

The International Union for Conservation of Nature (IUCN) helps the world find pragmatic solutions to our most pressing environment and development challenges. IUCN works on biodiversity, climate change, energy, human livelihoods and greening the world economy by supporting scientific research, managing field projects all over the world, and bringing governments, non-governmental organisations, the United Nations and companies together to develop policy, laws and best practice. IUCN is the world's oldest and largest global environmental organisation, with more than 1,400 members from government and non-governmental organisations and more than 15,000 volunteer experts. IUCN's work is supported by around 950 staff in more than 50 countries and hundreds of partners in public, non-governmental organisations and private sectors around the world.

www.iucn.org

IUCN World Commission on Protected Areas (WCPA)

IUCN's World Commission on Protected Areas is the world's premier network of protected area expertise. It is administered by IUCN's Programme on Protected Areas and has over 2,500 members, spanning 140 countries. WCPA helps governments and others plan protected areas and integrate them into all sectors by providing strategic advice to policymakers; by strengthening capacity and investment in protected areas; and by convening the diverse constituency of protected area stakeholders to address challenging issues. For more than 60 years, IUCN and WCPA have been at the forefront of global action on protected areas. The Best Practice Guidelines series is one of the Commission's flagship products, providing timely guidance on all aspects of protected area planning, management and assessment.

www.iucn.org/wcpa



IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas

The IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA) is a global network of members from diverse expertise and backgrounds. CSVPA is concerned with those cultural and spiritual values that support, foster and respect the interrelated character of nature and culture in protected areas. CSVPA recognises that protected areas are social constructs nested within broader landscapes perceived differently across worldviews.

www.csvpa.org



Convention on Biological Diversity

Convention on Biological Diversity (CBD) opened for signature at the Earth Summit in Rio de Janeiro in 1992, and entered into force in December 1993. The Convention on Biological Diversity is an international treaty for the conservation of biodiversity, the sustainable use of the components of biodiversity and the equitable sharing of the benefits derived from the use of genetic resources. With 196 parties so far, the Convention has near universal participation among countries.

www.cbd.int



The Delos Initiative

Under IUCN WCPA CSVPA, the Delos Initiative has focused on the sacred natural sites in technologically developed countries throughout the world, such as Australia, Japan, the United States of America and countries in Europe. The main purpose of the four international workshops organised during the last ten years has been to help maintaining the sanctity and biodiversity of these sites, through the understanding of the complex relationship between spiritual, cultural and natural values, promoting consensus-based actions. Since 2016 the Delos Initiative focus has slightly shifted to producing guidelines for sacred natural sites related to the world's religions.

http://www.med-ina.org/delos/



Sacred Natural Sites Initiative

The Sacred Natural Sites Initiative works with custodians, traditional knowledge holders, conservationists, academics and others in support of the conservation and revitalisation of sacred natural sites and territories. It promotes field-based action, advocacy and policy development for the conservation of sacred natural sites. Projects are custodian-guided and based on community strengths and resources. They are focused on locally-motivated cultural and biological conservation efforts. The Initiative engages with stakeholders, sectoral interests and the wider public to promote awareness, and respectful relationships with guardians of sacred natural sites.

www.sacrednaturalsites.org



Silene Association

A non-profit association aimed at the study, dissemination and promotion of the spiritual and intangible cultural heritage values of nature, particularly in relation to the conservation of nature and landscape. The Silene website hosts a documentation centre offering news, resources and documents on the natural world's intangible spiritual and cultural heritage and its conservation relevance, on a scale from local to international.

www.silene.ong



The German Federal Agency for Nature Conservation

The German Federal Agency for Nature Conservation (Bundesamt für Naturschutz, BfN) is the scientific authority for both national and international nature conservation. The Agency provides the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety with professional and scientific advice in nature conservation and landscape management issues and international cooperation activities. The International Academy for Nature Conservation, located on the island of Vilm, provides a forum for discussion and finding solutions to nature conservation challenges. It works closely together with a number of leading conservation organisations and hosts 70 national and international workshops and events annually.

www.bfn.de/en



The Mountain Institute

The Mountain Institute (TMI) protects critical mountain ecosystems and promotes prosperous livelihoods to create resilient mountain communities. TMI works closely with mountain communities, combining local and indigenous knowledge with the latest science to develop practical conservation and development solutions. With non-profit, government, academic and private-sector partners, its programmes promote natural resource conservation, sustainable economic development, climate change adaptation and resilience and cultural preservation. TMI has active programmes in the Andes, the Hindu Kush-Himalayas, and in the United States of America, as well as global initiatives including mountain areas elsewhere in the world.

https://mountain.org/

IUCN World Heritage Programme

The World Heritage Programme mobilises action across IUCN's wide network of members and experts to promote natural World Heritage. The Programme has an official advisory role to the World Heritage Committee and implements a wider project to achieve a Brighter Outlook for World Heritage. IUCN also implements various initiatives to enhance the role of the Convention in protecting the planet's biodiversity and promote effective use of its mechanisms to strengthen the conservation and management of natural World Heritage sites.

www.iucn.org/theme/world-heritage





ICOMOS

ICOMOS is a global non-governmental organisation that works for the conservation and protection of cultural heritage places across the globe. ICOMOS was founded in 1965 and comprises more than 10,000 individual members across more than 150 countries; 320 institutional members; 110 national committees; and 29 scientific committees. It is dedicated to promoting the application of theory, methodology, and scientific techniques to the conservation of cultural heritage. The members of ICOMOS contribute to improving the preservation of heritage, the standards and the techniques for each type of cultural heritage property. ICOMOS is an Advisory Body to the UNESCO World Heritage Committee.

www.icomos.org/en

ICCROM

ICCROM is an intergovernmental organisation working in service to its member states to promote the conservation of cultural heritage globally. It operates in the spirit of the 2001 UNESCO Universal Declaration on Cultural Diversity and acts an Advisory Body to the UNESCO World Heritage Committee. Working at the international and governmental levels, and with institutions and professionals on the ground, the organisation engages and informs new generations of professionals and the general public with an interest in heritage.

www.iccrom.org



The Christensen Fund

The Christensen Fund is a private foundation that believes in the power of biological and cultural diversity to sustain and enrich our world. Christensen focuses on the biocultural – the rich but often neglected adaptive interweave of people and place, culture and ecology. The Foundation's mission is to buttress the efforts of people and institutions who believe in a biodiverse world infused with artistic expression and work to secure ways of life and landscapes that are beautiful, bountiful and resilient. The Christensen Fund works primarily through grant making, with additional support for capacity and network building, knowledge generation, collaboration and mission-related investments.

www.christensenfund.org

Cultural and spiritual significance of nature

Guidance for protected and conserved area governance and management

Bas Verschuuren, Josep-Maria Mallarach, Edwin Bernbaum, Jeremy Spoon, Steve Brown, Radhika Borde, Jessica Brown, Mark Calamia, Nora Mitchell, Mark Infield and Emma Lee

Craig Groves, Series Editor

The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN or other participating organisations concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The views expressed in these guidelines do not necessarily reflect those of IUCN or other participating organisations.

IUCN is pleased to acknowledge the support of its Framework Partners who provide core funding: Ministry for Foreign Affairs of Finland; Government of France and the French Development Agency (AFD); the Ministry of Environment, Republic of Korea; the Norwegian Agency for Development Cooperation (Norad); the Swedish International Development Cooperation Agency (Sida); the Swiss Agency for Development and Cooperation (SDC) and the United States Department of State.

This publication has been made possible in part by funding from IUCN World Commission on Protected Areas, the German Federal Agency for Nature Conservation and The Christensen Fund. The IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas, The Mountain Institute, Silene Association, Delos Initiative and Sacred Natural Sites Initiative, provided significant in-kind contributions.

Published by: IUCN, Gland, Switzerland

Copyright: © 2021 IUCN, International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorised without prior

written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale or other commercial purposes is prohibited without prior written

permission of the copyright holder.

Citation: Verschuuren B., Mallarach J-M., Bernbaum, E., Spoon J., Brown S., Borde R., Brown J., Calamia M., Mitchell

N., Infield M and Lee E. (2021). Cultural and spiritual significance of nature. Guidance for protected and conserved area governance and management. Best Practice Protected Area Guidelines Series No. 32, Gland,

Switzerland: IUCN. XVI + 88pp.

ISBN: 978-2-8317-2089-0 (PDF)

978-2-8317-2090-6 (print version)

DOI: https://doi.org/10.2305/IUCN.CH.2021.PAG.32.en

Cover photos: © Edwin Bernbaum

Layout by: Laia Sadurní Llongueres

Printed by: Impremta Aubert, Catalonia, Spain

Available from: IUCN (International Union for Conservation of Nature)

Global Protected Areas Programme

Rue Mauverney 28, 1196, Gland, Switzerland

Tel +41 22 999 0000 Fax +41 22 999 0002 wcpa@iucn.org

www.iucn.org/resources/publications

The text of this book is printed on paper made from wood fibre from well-managed forests certified in accordance with the rules of the Forest Stewardship Council (FSC).

Contents

Foreword
PART 1 – ABOUT THESE GUIDELINES
A working definition of the cultural and spiritual significance of nature
PART 2 – THE CONTEXT
What are protected areas, conserved areas and cultural landscapes?
PART 3 – CULTURAL AND SPIRITUAL SIGNIFICANCE OF NATURE
Cultural and spiritual significance of nature: What does it mean and why is it important?
PART 4 – PRINCIPLES, GUIDELINES AND EXAMPLES
Principles Guidelines G.1: Identify all groups concerned in the conservation of particular protected and conserved areas G.2: Create common ground for different worldviews of stakeholders engaged in the conservation of protected and conserved areas G.3: Consensus building and conflict resolution in managing protected and conserved areas G.4: Assessment of values and significance of nature in protected and conserved areas G.5: Governance of protected and conserved areas G.6: Establishment of new protected and conserved areas G.7: Planning for protected and conserved areas G.8: Management implementation in protected and conserved areas G.9: Interpretation in protected and conserved areas G.10: Public use, visitation and engagement in protected and conserved areas G.11: Monitoring and evaluation in protected and conserved area management G.12: Adaptation and scaling of protected and conserved areas 5:
PART 5 - CASE STUDIES
1. Integrating the spiritual values, sacred sites and cultural framework of the Bakonzo, the Mountain People, into the management of Rwenzori Mountains National Park, Uganda
RESOURCES
References 74 Glossary 87 Acronyms 83 Author biographies 84

Boxes					
Box 1	How to use the guidelines5				
Box 2	IUCN, ICOMOS, ICCROM and the Nature Culture Journeys: Key aspects				
Box 3	Restoring, re-naming the land and waters				
Box 4	Jurisprudence on the recognition of nature and spirits as legal entities				
Box 5	Values, significance, attributes and authenticity				
Box 6					
Tables					
Table 1	Sacred scripts of the world's religious traditions that have no singular word to describe nature				
Table 2	One possible classification of values that make up the cultural and spiritual significance of nature				
Table 3	Best Practice Guidelines on the Cultural and Spiritual Significance of Nature in Protected and Conserved Areas 29				
Figures					
Figure 1	Illustrative framework of contrasting approaches to the process of valuation				
Figure 2	National Intrusion Maps				
Figure 3	An assessment in collaboration with local custodians				

Foreword: from IUCN and partners

The governance and management of protected areas is not built solely on robust science, it is - like in most conserved areas – also dependent on social support from people who value lands and waters because they are emblematic places of exceptional beauty, inspiration, mental well-being, traditional knowledge and artistic expression. These are the places ingrained in our memory, history and collective identity, the places from our youth that we grew up in and in which we had special experiences.

The cultural and spiritual significance of nature allows us to belong to a place, establish an emotional connection, deeply experience nature and develop a sense of attachment and care. In spite of this significance – and the values on which it is built – it is rarely taken into consideration in the planning, management and governance of protected areas in a socially just, practical and systematic manner.

These guidelines offer an approach towards establishing a prominent role for the cultural and spiritual significance of nature within the governance and management of protected and conserved areas. They attempt to overcome some of the difficulties caused by conflicting goals when dealing with nature and its conservation, in the context of culture. They do so by acknowledging the global diversity of worldviews, governance systems, religions, and languages that shape different understandings of nature. Much effort has therefore been undertaken to go beyond mainstream, positivist scientific epistemologies, concepts, approaches and languages that have shaped conventional conservation practice and policy to date.

to many protected area managers, encouraging them to go beyond the conceptual barriers of their scientific training and hopefully serving as inspiration to integrate the cultural and spiritual significance of nature throughout the many facets of their work.

Moreover, these guidelines will apply personally

As the late Lawrence Hamilton, past vice president of the IUCN World Commission on Protected Areas already made clear in 1993:

Natural scientists should not feel upset or refuse to take philosophical issues into account because this would improve both the conservation of biodiversity and culture; it will not be the scientists alone who will achieve the desired state of conservation, but cooperating with poets, artists and philosophers that affect human behaviour (Hamilton, 1993, p. 1).

These guidelines reflect the goals of the Nature-Culture Journeys, coordinated strings of events at international conferences and meetings organised by the world's leading natural and cultural heritage conservation organisations. They are being undertaken to enhance the collaboration between IUCN, ICOMOS, ICCROM and others, with a view toward bringing together the concepts of nature and culture to ensure more integrated and effective approaches to conservation.

It is our wish that the guidelines will further assist in building nature-culture linkages by recognising the cultural and spiritual significance of nature as fundamental to the conservation of natural and cultural heritage and in the work of IUCN, ICOMOS, ICCROM and beyond.

Kathy MacKinnon Chair IUCN WCPA

Trevor Sandwith Director IUCN GPAP

Tim Badman Director IUCN Nature-Culture Initiative Gwenaëlle Bourdin Director Evaluation Unit ICOMOS

Joseph King Director Partnership and Communication ICCROM

Acknowledgements

These guidelines have been produced by the IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA). They have been developed as part of a larger CSVPA Programme on Cultural and Spiritual Significance of Nature that also includes a peer-reviewed book (Verschuuren & Brown, 2019), exemplar case studies, training modules and a community of practitioners. These Guidelines are available in hard copy and electronic versions from the IUCN and CSVPA.

The work on the guidelines was initiated by CSVPA in 2012 after WCPA made start-up funding available. The first workshops on the development of the guidelines were held at the IUCN World Parks Congress 2014 (WPC) in Sydney, Australia, with financial support from The Christensen Fund. In 2015, work on the Guidelines commenced with the support of the German Federal Agency for Nature Conservation (BfN) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). Two dedicated workshops took place as part of the collaboration with the International Academy for Nature Conservation on the Isle of Vilm in Germany in 2016 and 2017. At the IUCN World Conservation Congress in Hawai'i, 2016, a workshop and Pavilion Event assisted in furthering the Guidelines and the training modules. In 2018, The Ramsar Culture Network dedicated a special session at their workshop on the Isle of Vilm, to evaluating the usefulness of the guidelines to wetland ecosystems.

Several other organisations have been key in lending their support to these guidelines, including: IUCN, WCPA, CSVPA, The Mountain Institute, The Delos Initiative, Sacred Natural Sites Initiative and Silene Association. We also recognise the support of the partners of the Nature-Culture Journey: the IUCN World Heritage Programme, the IUCN Nature-Culture programme, ICOMOS and ICCROM. These guidelines embody the collaborative approach toward improved nature-culture integration that these Nature-Culture Journeys represent.

We much appreciate the work of the specialist IUCN reviewers; Dave Harmon, Terence Hay-Edie, the Series Editor Craig Groves, the WCPA Chair Kathy McKinnon, and the Director of the IUCN Global Protected and Conserved Areas Programme Trevor Sandwith, that have ensured that these guidelines are of exceptional quality and use. Special thanks go to Nik Lophoukine (ex-Chair of WCPA), Kyra Bush (TCF) and Gisela Stolpe and Andrea Strauss (BfN) for their belief in and continued support to making these guidelines a reality.

The following people have contributed to these guidelines at various events or the complementary book. Some people who contributed to these guidelines have attended several of the events or contributed a chapter to the book. They are mentioned here only once, in connection with the first event they participated in.



Workshop participants kicked off the development of these best practice guidelines with brainstorming on the design of training module for integrating the cultural and spiritual significance of nature in the management and governance of protected and conserved areas, At the 6th World Parks Congress held in Sydney, Australia in November 2014. © Radhika Borde



Participants of the June 2017 Workshop on cultural and spiritual significance of nature in the governance and management of protected areas at International Nature Conservation Academy at the Isle of Vilm in Germany. © Andrea Strauss

Participants in the 2016 and 2017 IUCN WCPA CSVPA/BfN Workshops (Vilm Island, Germany): Edwin Bernbaum, Radhika Borde, Grazia Borrini-Feyerabend, Jessica Brown, Steve Brown, Fabrizio Frascaroli, Gilles Havik, Wendy Jackson, Andria Leburu, Letícia Leitão, Yolanda Lopes-Maldonado, Mark Calamia, Nigel Crawhall, Wiwik Dhamarishan, Erika Fernandez Pinto, Liza Higgins-Zogib, Nobuko Inaba, Mark Infield, Maya Ishizawa, Emma Lee, Irini Lyratzaki, Brent Mitchell, Dave Pritchard, Helen Schneider, Linda Scholten, Jeremy Spoon, Gisela Stolpe, Andrea Strauss, John Studley, Will Tuladhar-Douglas, Josep-Maria Mallarach, Alison Ormsby, George Ortsin, Gonzalo Oviedo, Rianne ten Veen, Bas Verschuuren, Matthew J. Zylstra.

Additional contributors participating in the 2018 Ramsar Culture Network/BfN Workshops (Vilm Island, Germany): Chris Fremantle, Gordana Beltram, Hellin Brink, Tobias Salathé, Henk van Schaik, Gordana Beltram, Thymio Papayannis, Kerstin Manz, Clemens Küpper, Karen Denyer, Chris Rostron.

Participants in the IUCN World Parks Congress 2014 Workshop (Sydney, Australia) and the IUCN World Conservation Congress 2016 Workshop (Honolulu, Hawai'i, USA): Amano Yohsuke, Charles Rue, Kim Dunlop, Gabriela Hidrobo, Te taiawatea Moko-Mead, Jessica Yuille, Olga Garcia, Adriana Gonzales, Syb Bresolin, Felipe Gomez, Sergio Couto González, Katherine Mitchell, Miriam Torres, Jo Breese, Tracy Page Jones, Karia Ramirez, Julie Flack, Nic van den Bronk, Tom Holyoake, Mendonca Guilherme, Jorge Nahuael, Christina Crespo, Altantsetseg, Yohsuke Amano, Ramlene Ballangarry, Leon Brown, Bruce Jefferies, B. Buyanbadrakh, Sarah Casson, Christina Crespo, Chrissy Grant, Tess Corkish, Nikki Cowcher, Roslyn Field, Scott Fry, Simon Habel, Heidi Hirsch, Eric Horstman, Isabelle Wolf, Gareth Johnston, Jakub Kašpar, Katie McSweeney, Kenneth Jussaume, Rajan Kotru, Maria Labanda Ortiz, Justin Lawson, Agnes Lee Agama, Naia Lewis, Aneli Gomez, Danie Lovaton, Manisha Gutman, Elke Mannigel, Lewis Marina, Shaunna Morgan, Geoff Mosley, Dissanayake Nilushi, Ruchi Pant, Paul Green, Ray Rabliauskas, Ajay Rastogi, Jacqui Redmond, Olivia Rickenbach, Robin Bellafquih, John Sinclair, Anastasia Skrebtsova, Erika Stanciu, Anastasia Steffen, Steve Douglas, Leah Talbot, Valerie Tambling, Jacinta Tobin, Riitta Wahlström, Greg Wellham, Pam Wickham, Ashley Massey, Jasmine Chen, Robert Sluka, Daisube Funaki, Matthew Hatchwell, Denis Rose, Nakul Chettri, Santiago Palacios, Marques Marzan, Mary Ann Kalei Baricuatro, Sarah Titchen, Hong Jiang, Lora Gale, Masahito Yoshida, Chris Johnston, Gakemotho Satau, Heather Lazaruk, Chantal Elkin, Mahealani Wong, Harvey King, Thomas Schaaf, Jonathan Liljeblad, Tina Lee, Oliver Ryder, Leesa Riley, Phil Pegler, Morgane Juliat, Jean Balson, Jorge Recharte, Bruce, Jefferies, Naoya Furuta, Archana Godbole, Bob Sluka, Cindy Orlando, Joni-Mae Makuakane-Jarrell, Keola Awong, Jim Gale, Emily Cook, Mechtild Rössler, Graeme Worboys, Jan van der Ploeg, Thora Amend, Andrew Taber, Barbara Engels, Peter Bille Larsen, Ingunn Kvisteroy, Louise O'Meara.

The authors of the complementary book (Verschuuren & Brown, 2019): Alberto de Armas, Tim Badman, Gwenaëlle Bourdin, Kristal Buckley, Bixia Chen, Chris Coggins, Eulàlia Comas, M. Soubadra Devy, Thora Fjeldsted, James L. Flexner, Ganesh Thyagarajan, Cem Gultekin, Francis Hickey, Peter Horsley, James (Wai Lun) Lam, Jonathan Liljeblad, Lamont Lindstrom, Jesse Minor, Marta Múgica de la Guerra, Oscar Mthimkhulu, Arthur Mugisha, Martin Palmer, Sanjay Rattan, Fredrick Ssali, Peter Tiso, Zsuzsa Tolnay, Medard Twinamatsiko, Leanna Wigboldus, Yaoqi Zhang.

Others whose contributions to these guidelines we acknowledge with thanks are: Dave Reynolds, Ted Trzyna, Nevena Tatovic, Gretchen Walters, Joseph King, Gamini Wijesuriya, Harry Jonas, Mariam Ali, Timothy Collins, Richard Arnold and tebrakunna country.

Executive summary

These guidelines offer an approach towards creating a prominent and appropriate role for the cultural and spiritual significance of nature within the governance and management of protected and conserved areas. They attempt to overcome some of the difficulties caused by conflicting goals when engaging with culture in the context of nature conservation. They do so by acknowledging the global diversity of worldviews, governance systems, religions, and languages that shape different understandings of nature.

The cultural and spiritual significance of nature has been defined as the spiritual, cultural, inspirational, aesthetic, historic and social meanings, values, feelings, ideas and associations that natural features and nature in general have for past, present and future generations of people – both individuals and groups. The attributes of nature conveying such significance range from species of flora and fauna to natural features to entire landscapes and waterscapes. They can encompass diverse manifestations such as night skies, monumental features, intimate local sites, as well as the practices, knowledge, (non)human relationships, dependencies and institutions associated with them.

The word 'significance' has been chosen rather than 'values' in order to emphasise the inclusion of knowledge, meaning, and feelings as well as values that make the concept widely applicable and acceptable as something essential to managing and governing protected and conserved areas effectively, inclusively, and equitably.

The cultural and spiritual significance of nature, including intangible cultural heritage, cover a growing area of interest to practitioners that may previously have been overlooked or otherwise excluded from the governance and management of protected and conserved areas. This may be due to a historic reliance on the natural sciences and more recently economics, that can view humans as separate from nature and potentially detrimental to it. It shows a lack of understanding or consideration of the cultural and spiritual significance that nature has for people in general as well as for Indigenous peoples, religious groups, and the public that make up large sections of their users. These placebased connections can also embody and foster more environmentally sustainable decisions and practices.

The guidelines respond to a growing need to make conservation more inclusive, effective and socially just by accommodating multiple worldviews; by treating natural and cultural heritage as interlinked; and by suggesting ways for engaging and empowering all relevant groups and stakeholders in protected area design, governance and management. The guidelines also assist with creating common ground, resolving conflicts and implementing rights-based approaches that recognise human rights and legal pluralism.

The aims of these guidelines are:

- 1. To provide advice and lessons learned on how to reflect the cultural and spiritual significance of nature in integrated and holistic approaches for the governance and management of protected and conserved areas at local, national and international levels and making their management and governance more sustainable, effective, inclusive, resilient and socially equitable.
- 2. To empower and enable groups and stakeholders within, adjacent to, and/or otherwise related to protected and conserved areas, who are concerned with the cultural and spiritual significance of these places, and to participate in or lead their governance and management.
- 3. To encourage the establishment of common ground for working together towards the conservation of nature and culture and of networks for the support of nature-culture linkages among groups focusing on natural, cultural or spiritual values.
- 4. To promote awareness, understanding and recognition of the cultural and spiritual significance of nature, including among those that help conserve biodiversity, with protected and conserved area practitioners and those interested in becoming involved.

These guidelines include six overarching principles which offer a foundation for the implementation of the more specific guidelines. The principles are general; they can be applied by all stakeholders, groups, and interested parties for whom the cultural and spiritual significance of nature has a role to play.

The principles are not intended to be hierarchical or sequential, but rather can be applied as required or relevant in relation to each particular situation or project.

The principles are:

- 1. Respect diversity
- 2. Build diverse networks
- 3. Ensure safety and inclusivity
- 4. Account for change
- 5. Recognise rights and responsibilities
- 6. Recognise nature-culture linkages

The principles are followed by 41 guidelines divided over 12 main headings. Each guideline has been illustrated with an example of its implementation. Ten case studies demonstrate in depth, how these guidelines can be implemented in protected areas worldwide. As an integral part of the wider IUCN Programme on the Cultural and Spiritual Significance of Nature (CSVPA) these case studies may be used in complementary training modules as well as for educational purposes. The case studies have been selected to represent an even spread across religions and spiritual traditions, management categories, governance types and geographical regions including: Australia, India, Italy, Japan, Mexico, Romania, Solomon Islands, and Uganda.

These guidelines will further assist in building nature-culture linkages by recognising the cultural and spiritual significance of nature as fundamental to the conservation of natural and cultural heritage and in the work of IUCN, ICOMOS and ICCROM. As such they will assist in bringing together the various practices under different disciplinary fields and policies. To keep track of their uptake and effectiveness CSVPA welcomes feedback and sharing of experiences regarding the implementation or adaptation of these guidelines at all levels; contact us through www.csvpa.org. Whenever possible, feedback will be used for reporting back to IUCN regarding Resolution 033: Recognising Cultural and Spiritual Significance of Nature in Protected and Conserved Areas (IUCN, 2016), that supports these guidelines and the training modules.



About these guidelines



Hindu Swami Tree Planting Ceremony Badrinath, India. © Edwin Bernbaum



On the Isle of Rügen at the Baltic Sea, the Goor nature reserve offers a 4,2 km 'Pfad der Muße und Erkenntnis' (trail of leisure and insight) which allows visitors to follow a trail that is marked by various stations. Each station is an invitation to experience nature, such as here were visitors meditate leaning with their backs against the majestic beech trees Fagus sylvatica. © Bas Verschuuren

A working definition of the cultural and spiritual significance of nature

The guidelines define the cultural and spiritual significance of nature as relating to those attributes of nature that are evident at all levels of ecological organisation, ranging from species of flora and fauna to geological and topographic features to entire landscapes and waterscapes. They can encompass diverse manifestations such as night skies, monumental natural features, intimate local sites, as well as the practices, knowledge, beliefs, (non)human relationships and institutions associated with them.

In these guidelines the word 'significance' is used to emphasise the inclusion of knowledge, meaning, and feelings as well as values that make the concept widely applicable and acceptable as something essential to designing, managing and governing protected and conserved areas effectively, inclusively and equitably. For a broader discussion on this meaning, see Brown & Verschuuren (2019). For further explanation on the importance of the cultural and spiritual significance of nature, the values that it is built on, the knowledge it conveys, and its meaning in the context of governance and management of protected and conserved areas, see part 2.

Why are the guidelines needed?

These guidelines cover a growing area of interest to practitioners that may previously have been overlooked or otherwise excluded from the governance and management of protected and conserved areas (Harmon & Putney, 2003; Sarmiento et al., 2014). This may be due to a historic legacy of cultural imperialism and reliance on natural sciences in the management and governance of protected areas. It may also be due to a lack of understanding or consideration of the cultural and spiritual significance that nature has for stakeholders such as religious groups, indigenous peoples and the public that make up large sections of their users. There has also been a general lack of information with relatively few key publications focusing on related topics. For example, the IUCN Best Practice Guidelines on Sacred Natural Sites (Wild & McLeod, 2008) engage with sacred natural sites mostly of indigenous people and don't engage the broader cultural and spiritual significance that nature has for diverse groups of people (see IUCN resolution 033, IUCN 2016). These considerations may explain the lack of practical conservation guidance for protected and conserved area managers to take the cultural and spiritual significance of nature into account in the governance and management of protected areas. These guidelines seek to remedy this situation.

Many official or legal designations of the world's protected areas are based on a conceptual and institutional divide, whereby nature and culture are viewed as intrinsically distinct or separate. This has led to a number of problems and challenges. At the most practical level, the natureculture dichotomy has resulted in many governments

establishing separate mandates for the conservation of nature and culture, often based on different national laws and administrative structures. This institutional nature-culture divide may be very difficult to change in the short- and mid-term. However, some improvements which practically benefit conservation and stimulate collaboration among the institutions and organisations involved are now underway. To this end, the guidelines stress the need for collaboration among institutions at all scales. Similarly, they call for theoretical frameworks that consider nature and culture as inextricably linked (Posey, 1999) and therefore allow for the cultural and spiritual significance of nature in different worldviews to be equally supported.

These guidelines also respond to an increasing need to make conservation more inclusive, effective and socially just (Borrini-Feyerabend et al., 2013; Verschuuren & Brown, 2019). They do so by including and accommodating multiple worldviews; by treating natural and cultural heritage as interlinked; and by suggesting ways for engaging and empowering all relevant groups and stakeholders in protected area governance and management. The guidelines also assist in creating common ground, resolving conflicts and implementing rights-based approaches that recognise human rights and legal pluralism. The guidelines therefore can provide a practical reference for making the cultural and spiritual significance of nature part of the governance and management of protected and conserved areas in new and innovative ways.

While we recognise that published guidelines follow a style that is based upon western-knowledge structures, the genuine intent is to speak to the broadest possible set of cultures and worldviews, and encourage respect for this diversity. The need for conservation organisations to acknowledge the multiplicity of concepts and values of nature has been explicitly recognised by IUCN in resolution 4.099 (IUCN, 2012). More specifically, the guidelines acknowledge the cultural and spiritual significance of nature in the governance and management of protected and conserved areas, as recognised by IUCN resolution 5.033 (IUCN, 2016a).

Finally, protected areas are increasingly challenged to broaden the scope of their governance, design and management. A broader scope also engages a wider range of management and governance actors such as indigenous people, religious groups and the general public. Recognition of these groups can broaden constituencies and bring social and political awareness and increased support for protected areas and nature conservation in general. These guidelines offer a comprehensive approach to facilitating such change through focusing on the cultural and spiritual significance of nature.

Scope of the guidelines

These guidelines focus on the cultural and spiritual significance of nature within protected and conserved areas, established with the primary objective of conserving nature, or which deliver conservation outcomes as a result of their governance and management. These include World Heritage sites, Ramsar sites, national parks, nature reserves, indigenous and Community Conserved Areas (ICCA's), privately protected and conserved areas, and other designations from the international to the local level. The guidelines, therefore, cover all IUCN protected area categories and governance types within the context of the broader landscape and seascape, including conserved areas and Other Effective Area-based Conservation Measures (OECMs). OECMs are not protected areas but recognise areas that yield effective conservation regardless of their objectives. This can be the outcome of customary, traditional and religious management and governance of spiritual, religious and cultural landscapes and waterscapes as well as natural elements of cultural or spiritual significance, such as sacred natural sites (IUCN WCPA Task Force on OECMs, 2019).

The guidance provided on cultural and spiritual beliefs and practices relates to management and governance from a conservation perspective with the primary aim to recognise rights and aid collaboration between all actors involved: protected area managers, conservation planners, religious groups, indigenous people and other culture bearers. These guidelines support the cultural practices that are aimed at, or result in the conservation of nature and underpin the values and significance of cultural and spiritual connections. The guidelines reinforce the definition of protected and conserved areas and therefore are sympathetic to cultural practices that favour nature conservation.

These guidelines do not support religions, beliefs, forms of spirituality, and cultural practices that harm, interfere with or diminish connections between humans and nature that are meaningful to successful conservation outcomes. They are designed to promote the conservation of nature but they also seek to emphasise that conservation is in itself a cultural matter. Of course, there can be big disagreements about whether a specific cultural practice is harmful to humannature connections, and the question then becomes one of who is to decide how such practices should be managed. These guidelines aim to enable multiple ways of seeing and understanding these complex issues in the context of governance and management of protected areas.

These guidelines do not seek to advise on the conservation of built heritage, architecture or archaeological monument sites. These would benefit from different, specialised guidance on built heritage such as provided by ICOMOS and ICCROM or the work under the UNESCO Historic Urban Landscapes recommendation (UNESCO, 2011a). Even so, built heritage can be an important aspect of protected area management and delivering conservation outcomes as demonstrated in the IUCN Green List of Protected and Conserved Areas (IUCN, 2017, p. 43). The IUCN Green List

for Protected and Conserved Areas – which sets global standards for protected areas in the 21st century – includes measures for the role of culture in the governance and management of protected areas (IUCN WCPA, 2016). These guidelines will assist in meeting Green List of Protected Areas' requirements concerning culture and support a much broader approach for the integration of cultural and spiritual significance of nature throughout all aspects of governance and management of protected and conserved areas.

Intended users of the guidelines

The guidelines have been developed primarily as a tool for protected area and conservation managers, planners and policy makers. Working with these guidelines on the cultural and spiritual significance of nature can help them to recognise, value, and sometimes to rediscover that inspiration and work on projects that give them more scope for creativity. In addition, they are also relevant to all stakeholders concerned with the governance and management of protected and conserved areas. These increasingly include indigenous people and local communities, religious groups, the general public and the organisations that represent them. For example, indigenous people and local communities can use these guidelines in their efforts to have their rights and worldviews recognised and use their culture and spirituality in area-based conservation planning, governance and management with which they are engaged. Other examples of groups that may use these guidelines include: government institutions, cultural heritage organisations, different business sectors, and advocacy groups of specific resource users.

Box 1

How to use the guidelines

The guidelines are organised into five parts:

- · Part 1 ABOUT THESE GUIDELINES explains why these guidelines are needed, their aims and their scope. This section also explains the target audience and user groups, and how they can best be used. It closes with some limitations of the guidelines.
- · Part 2 THE CONTEXT clarifies the context of protected and conserved areas and how cultural and spiritual significance of nature gradually received focus in the international conservation arena and particularly in the work of IUCN. It explains what is meant by the complementary approaches of rights and responsibilities, and ends with a discussion concerning an ethics of living and well-being.
- · Part 3 CULTURAL AND SPIRITUAL SIGNIFICANCE OF NATURE discusses why including the cultural and spiritual significance of nature in protected and conserved areas is important. It clarifies the role of cultural and spiritual values, attributes and significance and consequently explains what values and significance led conservation means in protected and conserved areas, as well as their potential role in the governance and management. The section ends with an overview of the values that are central to these guidelines.
- · Part 4 PRINCIPLES, GUIDELINES AND EXAMPLES present overarching principles followed by guidelines organised in four groups: i) building relationships; ii) inventory and assessment; iii) governance; iv) management; and v), adaptation and scaling. Each guideline is illustrated with case studies or examples showing how it can be implemented in different places around the world.
- · Part 5 CASE STUDIES demonstrate how these guidelines can be implemented in protected areas worldwide. As an integral part of the wider IUCN CSVPA Programme on the Cultural and Spiritual Significance of Nature, the case studies will be available online (see www.csvpa.org), and can also be used for educational purposes and training modules. Several more case studies are described in depth in the complementary edited volume (see Verschuuren & Brown, 2019).



Cherokee Elder pointing out buzzards on Oconaluftee River Trail, USA. © Edwin Bernbaum



The context

2



This section describes the context required for understanding the role that the cultural and spiritual significance of nature can play in the management and governance of protected and conserved areas.

What are protected areas, conserved areas and cultural landscapes?

Protected areas are known for their natural values but as well as for their aesthetic beauty, landscapes and waterscapes that inspire the arts, humanities and literature. These are often emblematic or iconic sites of national or international significance that signify individual, community and state identities. The IUCN definition of protected areas is now as follows: "A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature, with associated ecosystem services and cultural values" (Dudley, 2008, p. 8).

The description of IUCN protected area categories also includes explicit reference to the integration and recognition of cultural and spiritual values as well as sacred natural sites across all categories and governance types (Borrini-Feyerabend et al., 2013). Nonetheless, in cases where nature and cultural values conflict, the broader IUCN definition emphasises the primacy given to conserving natural values in protected areas.

The IUCN definition of protected areas embraces their establishment "through legal or other effective means," implying that a range of actors is involved across the suite of governance types. In addition, IUCN embraces the wider concept of conserved areas, which are not protected areas but which nevertheless deliver conservation outcomes (Jonas et al., 2014). These include the "other effective areabased conservation measures" from Aichi Target 11 of the Convention on Biological Diversity (CBD), a definition and voluntary guidelines for which were adopted by the CBD COP14 as follows:

A geographically defined space, not recognised as a protected area that is governed and managed over the long-term in ways that deliver the effective in-situ conservation of biodiversity, with associated ecosystem services and cultural and spiritual values (IUCN WCPA Task Force on OECMs, 2019).

Whereas protected areas must have a primary conservation objective, OECMs are defined because they deliver effective biodiversity conservation regardless of their management objective. Many cultural sites such as sacred natural sites and sites of spiritual or religious significance may qualify as OECMs. As the global understanding of OECMs increases, so will their recognition in national policies and conservation schemes. This guidance may contribute to drawing further attention to OECMs, and bring inspiration to their management and governance. Whereas most 'conserved areas' may meet the CBD definition of OECMs, in some cases, neither their custodians nor national authorities

may wish them to be recognised or reported through the mechanism of the CBD, and therefore there are also many 'conserved areas' that result in the conservation of nature and culture that fall outside the scope of the CBD's purview.

These guidelines are particularly relevant to natural and mixed World Heritage sites were the cultural and spiritual significance of nature requires more specific development in their planning, management and governance. The guidelines draw on experiences of those managing and governing World Heritage 'cultural landscapes' which have cultural aspects recognised through assessment and management planning following guidance of ICOMOS. For example, the associative cultural landscape has been shaped by the powerful religious, artistic or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent (IUCN, 2016a; UNESCO, 2017). Typically, spiritual and religious significance can exist in any given landscape, including mixed cultural and natural landscapes, provided that people have such relationships with nature in that landscape (Finke, 2013).

Different technical and disciplinary classifications for protected and conserved areas exist just like each culture will have its own classification of nature and landscape based on its own worldview. In these guidelines, the diversity of these concepts is recognised and is seen as a source of richness and opportunity.

Evolving the cultural and spiritual significance of nature in protected and conserved areas

The inclusion of the cultural and spiritual significance of nature in the governance and management of protected and conserved areas was given a broader platform through the mandate of the IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA) which was founded in 1998. CSVPA drafted recommendation 12 for the Vth IUCN World Parks Congress held in Durban, South Africa, in 2003. The recommendation offers advice on the integration of cultural and spiritual values in the strategies, planning and management of protected natural areas (IUCN, 2003). It also included a more general call for protected areas to "give balanced attention to the full spectrum of cultural and spiritual values" and has led to their inclusion in many of the IUCN WCPA Best Practice Guidelines that have been published since. IUCN 2004 Resolution 3.020 reaffirms IUCN's position on the matter: "commitment to an ethical view of nature conservation, based on respect for the diversity of life, as well as the cultural diversity of peoples" (IUCN, 2004), see Box 2.

Rising to the Durban challenge, CSVPA produced an edited volume entitled: The Full Value of Parks: From Economics to the Intangible (Harmon & Putney, 2003) and for some time shifted to focus its activities on sacred natural sites. In this context, CSVPA hosted the Delos Initiative and the Sacred Natural Sites Initiative which each resulted into many more ground-breaking publications (Mallarach et al., 2012; Mallarach & Papayannis, 2006; Papayannis & Mallarach, 2009: Verschuuren et al. 2010: Verschuuren & Furuta. 2016: Verschuuren & Liljeblad, 2019) as well as a number of IUCN resolutions (IUCN, 2008, 2012). CSVPA's work on sacred natural sites resulted in the IUCN WCPA Best Practice Guidelines on Sacred Natural Sites (Wild & McLeod, 2008).

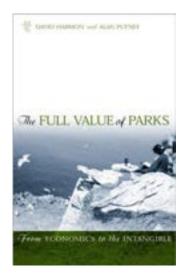
In 2012, CSVPA initiated the Programme on Cultural and Spiritual Significance of Nature (Bernbaum, 2017). The programme includes the development of a network of professionals, case studies and this volume of IUCN Best Practice Guidelines. The guidelines are complemented with an edited volume: Cultural and Spiritual Significance of Nature in Protected Areas, Governance, Management and Policy (Verschuuren & Brown, 2019) which form an important part of this programme.

Building on this background, the IUCN World Conservation Congress 2016 – the first to have a high-level segment on religion and conservation – adopted IUCN 2016 Resolution 5.033: "Recognising cultural and spiritual significance of nature in protected and conserved areas" (IUCN, 2016a). At the occasion, the IUCN General Assembly unequivocally stressed the importance of spirituality, religion and culture have a key role in nature conservation. The Mālama Honua commitments (Box 2) demonstrate the inclusion of the cultural and spiritual significance of nature in conservation progress made on the Nature-Culture Journey (IUCN, 2016b).

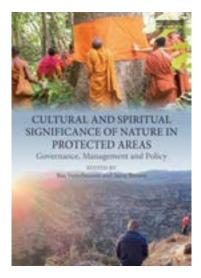
Biocultural diversity and linking nature-culture concepts

'Biocultural diversity' is a phrase that means the sum total of the Earth's biological and cultural diversity in all its expressions. The concept was first introduced in the Declaration of Belém (1988) which proposed to view nature and culture as inextricably linked (Posey & Dutfield, 1996). Since then, it has received growing support from empirical evidence demonstrating that cultural and biological diversity tend to co-occur and co-evolve at a global scale (Gorenflo et al., 2012; Loh & Harmon, 2005). The concept of biocultural diversity is one of several attempts to move beyond the Western dichotomy of nature and culture in theory, practice (Gavin et al., 2015) and policy (Bridgewater & Rotherham, 2019). UNESCO and the CBD Secretariat have developed a joint Programme on Linking Biological and Cultural Diversity with the goal of developing a more holistic approach needed to reverse both the current trends of erosion of biodiversity and weakening of cultural diversity. Interlinkages of 'cultural and biological diversity' and 'human well-being and nature' also have implications for the governance and management of protected and conserved areas the world over.

Intangible cultural heritage and beliefs associated with particular landscape features - such as groves, caves, or water bodies that make them sacred to some people - can be described as attributes. Natural features can also be culturally, spiritually, and aesthetically significant in many other ways that are not necessarily religious or traditional. Illustrating this point are the diverse cultural and inspirational roles of mountains celebrated in the paintings of Western artists as such as Paul Cézanne (La Montagne Sainte-Victoire) and Frederic Church (Cotopaxi and Andean landscapes) and the photography of Ansel Adams (Yosemite and the Sierra Nevada). Another example of interlinked







Important reference works on cultural and spiritual values of protected areas produced by IUCN WCPA CSVPA. From left to right: Harmon & Putney, 2002; Wild & McLeod, 2008; Verschuuren & Brown, 2019.

nature and culture is found among rural Christian people in Italy (see Case study 5.5, Part 5) who not only celebrate connections with the landscape through religious devotion (e.g. processions and festivals) but also demonstrate attachment to livelihoods (e.g. mobile pastoralism and application of traditional knowledge) and food production (e.g. cultural varieties and food cultures). In many societies, the cultural and spiritual significance of nature is part of broader value systems and worldviews that also generate unique ethics of living. The inspiration and spiritual empowerment that connectedness with nature creates can support broader sets of values, such as respect for the cultural and biological diversity of the planet, and ethical care for sustainability and planetary future (see Zylstra, 2019).

In contemporary protected area management, there are significant differences in approaches to working with natural and cultural values. Some differences are clearly linked to a more compartmentalised, technocratic or scientific understanding of nature, either as ecosystems, geoheritage or biodiversity. However, the nature-culture dichotomy is also subject to a diversity of cultural perspectives, national

approaches, cross-disciplinary critiques, instructional and legal structures, as well as different communities of expertise and practice (for example, members of IUCN and ICOMOS). Consequently, these guidelines aim to support the development of integrated, unifying approaches where a diversity of worldviews and concepts - including but also beyond nature and culture – can find broader application in international protected area governance, management and policy.

Valuable work to achieve more integrated and holistic approaches concerning cultural and natural heritage conservation is underway through partnerships between IUCN, ICOMOS and ICCROM (Box 2). These three Advisory Bodies to the World Heritage Committee) are exploring more unified approaches among practitioners, experts and institutional collaborations to help overcome barriers when working with nature and culture in World Heritage sites separately (Leitão et al., 2017; Leitão et al., 2019). The collaboration has resulted in two international declarations relevant to integrating nature-culture work for heritage practitioners (see Box 2).



Kahana Community Hukilau Prayer Circle. Kahana, Koolauloa, Oahu, Hawaii, USA. © Mark Lee, Holladay

Box 2

IUCN, ICOMOS, ICCROM and the Nature Culture Journeys: Key aspects

In parallel to IUCN's work on the conservation of natural heritage and its associated cultural significance, much important work in the field of cultural heritage has been undertaken by the International Council on Monuments and Sites (ICOMOS, www.icomos.org). ICOMOS is a non-governmental international organisation dedicated to the conservation of the world's monuments and sites. Like IUCN, ICOMOS is an advisory body to the World Heritage Committee. ICOMOS works through national committees, and has established international scientific committees on various cultural heritage themes and issues, and these include, for example, intangible cultural heritage, cultural landscapes and places of religion and ritual. Particularly relevant to these guidelines is also the ICOMOS Quebec Declaration on the preservation of Spirit of Place (ICOMOS, 2008). The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM, www.iccrom.org) is an intergovernmental organisation working in service to its member states to promote the conservation of all forms of cultural heritage, in every region of the world conservation, including training, information, research, cooperation and advocacy. Working at the international and governmental levels, and with institutions and professionals on the ground, ICCROM relies on institutional collaborations with organisations such as UNESCO; non-governmental organisations such as ICOMOS; and scientific institutes and universities in member states.

The IUCN World Parks Congress 2014's Promise of Sydney paved the way for the Nature Culture Journeys by referring to the cultural and spiritual significance of nature (IUCN, 2014). It also made recommendations for World Heritage to recognise indigenous peoples' cultural values as universal, and develop methods for recognising the interconnectedness of natural, cultural, social and spiritual significance of World Heritage sites (IUCN, 2015: p. 4). The IUCN ICOMOS and ICCROM Nature Culture Journeys held during the IUCN World Conservation Congress in Hawai'i and the ICOMOS General Assembly in Delhi (2017), respectively, yielded the Mālama Honua commitments (IUCN 2016b) and the Yatra aur Tammanah commitments (ICOMOS 2017) which contain the following most relevant findings and recommendations:

Mālama Honua commitments (IUCN 2016b):

- · Recognise the spiritual and sacred dimensions of nature and culture, and commend the dialogue and outcomes of the Spirituality and Conservation Journey, that contributed to our reflections.
- · Value the inspiring examples of harmonious approaches to nature and culture shared at the Congress that demonstrate place-based approaches, governance and equity, respect for the rights of indigenous peoples and local communities, and strengthen traditional institutions.
- Recognise our deep concern that cultural and natural diversity and heritage are seriously threatened around the world by a number of challenges including climate change, and that the construction of the culture/nature divide.
- · Call upon IUCN to develop and adopt a policy on understanding and incorporating cultural values and practices in nature conservation as resolved by the 2008 IUCN World Conservation Congress.
- · Call upon ICOMOS to further develop its activities for incorporating natural values and practices in cultural heritage, and to continue this Nature-Culture Journey collaboration and conversation at its General Assembly in New Delhi, India in 2017.

· The Yatra aur Tammanah (ICOMOS 2017):

Western languages reflect a Western ontology that separates nature from people and this permeates our culture, thinking and approaches. ICOMOS, IUCN and all their partners should therefore aim to find different concepts and words that can overcome this situation.

For these reasons, the term 'naturecultures' (with no space, hyphen or 'and' between them) because it recognises these domains as inseparable, entangled and mutually constituted. Naturecultures can encompass and include concepts such as biocultural diversity, geodiversity and agrobiodiversity, and the multiple perspectives of disciplines and worldviews.

We believe that in our fragmented times, it is important to strive to work with a spirit and mindset like that of a konohiki, a Hawaiian term and title for a person tasked to serve as a bridge between government, people and place in a way that invited a willingness to care for that place together. Naturecultures creates a space, a rich common ground and new paths to collaboration. On our way to these common understandings we stumble over terms, constructs and institutional assumptions, all of which trouble us with unshared meanings. When we take the time to explore ideas in detail, we can step beyond troublesome labels. We celebrate those elements of our work that draw us together, and recognise the need to let go of those words and concepts that restrain us.

Rights and responsibilities

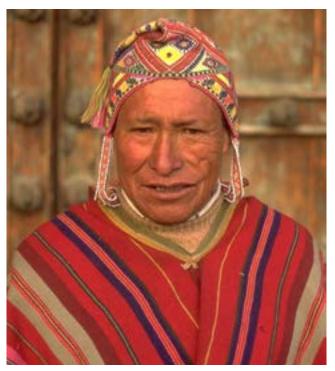
Rights-based approaches to protected areas have been receiving increasing attention in international conservation organisations, cognizant of changes in international legal policy (Borrini-Feyerabend et al. 2013). The historic contestations between people and parks are increasingly being reviewed and reconciled, and policies are being put in place to avoid further wrongdoing. The United Nations Declaration on the Rights of Indigenous People (UNDRIP, 2007), for example, offers clear guidance on this through Article 8:

Indigenous peoples and individuals have the right not to be subjected to forced assimilation or destruction of their culture. States shall provide effective mechanisms for prevention of, and redress for; (a) Any action which has the aim or effect of depriving them of their integrity as distinct peoples, or of their cultural values or ethnic identities; (b) Any action which has the aim or effect of dispossessing them of their lands, territories or resources.

When respecting the rights of those stakeholders that relate to the cultural and spiritual significance of nature in protected areas, a broader bundle of rights will need to be recognised.



Goreumbi sacred natural site, Jeju, South Korea. © Bas Verschuuren



An Andean curandero or traditional healer who derives his power to diagnose and cure from his relationship to the apu or spirit of his sacred mountain near Cuzco, Peru. © Edwin Bernbaum

This bundle consists of several international conventions which have produced soft law such a UNDRIP (2007) but also legally binding treaties such as the Convention on Biological Diversity, the UNESCO Convention on the Protection of the World Cultural and Natural Heritage, and the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage. There also exists a body of jurisprudence on cultural, religious and public rights that has relevance for the governance and management of protected areas.

Through a collaborative effort between IUCN, ICOMOS and ICCROM, a framework for the inclusion of human rights has been developed to better integrate this issue into World Heritage processes (Bille Larsen, 2018; Disko et al., 2014). In protected areas, the IUCN Green List of Protected Areas (IUCN WCPA, 2017) sets the standard for sound governance and management worldwide and provides guidance on integrating rights-based approaches (including traditional law and practices, as well as indigenous, cultural, and religious rights) throughout all aspects of governance and management of protected and conserved areas. A wellknown example of efforts to address the restitution of rights is the handing back of lands to their traditional owners. Other lesser known examples are the restoration and renaming of places to their culturally appropriate names (Box 3).

Box 3

Restoring, re-naming the land and waters

Restoring names that were 'stolen or silenced' by colonialism is not only about rights and visibility, but also about the transmission of culture and language in relation to the recovery and revitalisation of geographic and ecological knowledge. This is important to younger generations, especially to 'disposed' communities who can culturally and spiritually re-connect with places. Renaming places to their traditional and culturally appropriate names is also used by indigenous people and local communities to support claims to their rights based on what is known as 'counter-mapping'.

An example in point is that of Mathó Thípila (in Crow) meaning 'Bear's Lodge' or 'Home of the Bear' in Cheyenne and Lakota (see cover of Wild & McLeod, 2008). The current name 'Devils Tower' originates from the 1875 expedition where an interpreter misinterpreted the native name to mean 'Bad God's Tower'. Subsequently 'Devils Tower' became the first declared United States National Monument, established in 1906, by President Theodore Roosevelt.

This creation story talks of two youths being trapped on the mountain while being charged by a bear whose claw marks shaped the sides of the mountain. Bear's Lodge is a sacred site to all of the First Nations in the area and many regard the name 'Devils Tower' as offensive. Attempts to change the official name to 'Bear Lodge National Monument' have not succeeded to date.



Mathó Thípila or Bear Lodge, commonly known as Devils Tower National Monument, is a sacred site that has deep cultural meaning to several groups of indigenous people (Wild & McLeod, 2008). © Christopher McLeod

Examples of where these guidelines can offer additional assistance in further integrating rights-based approaches are with the traditional law and governance structures that include cultural responsibilities and duties to landscapes, waterscapes and night skies. Although these are not always recognised as legal rights, they should be addressed in protected area governance and management, for example, in a governance committee or plan of management. As these differ widely from culture to culture, there has been ample discussion on the pairing of 'rights, duties and responsibilities' with reference to the governance of protected areas (Borrini-Feyerabend et al., 2013). Doing so often involves the integration of multiple, sometimes very different worldviews, and of the perspectives of people living in, close to, or further away from protected area. This means that there are inevitably trade-offs between different values where a win-win outcome might not be possible. Such situations require that integration of rights, duties and responsibilities become increasingly guided by the development of an ethics of diversity in conservation (see Box 2, SCBD, 2011).

Customary law is used to help govern many areas, now considered protected, by indigenous people and local communities who serve as stewards of these places since time 'immemorial'. For an example on the role of customary laws in the governance and management of the Xe Champhone Ramsar Site in Lao PDR, see Glémet et al., (2016). They demonstrate how spiritual governance is founded on the duties that indigenous people have in terms of maintaining healthy relationships with deities, ancestors and ancestral creator beings that inhabit natural features in the landscape (Studley & Horsley, 2019). This form of practice and belief is found among many of the world's animistic indigenous people, for example in the Tibetan Autonomous Region in Southern China (see Case study 5.2, Part 5 and CSVPA, 2018g). There is also an increasing body of international jurisprudence about the protection of nature and natural features that have been inhabited by spirits or bear other cultural relevance (Box 4).



Maya spiritual leaders circumambulate a Shu Sagrib-Al, a sacred mountain mentioned in the Popul Vuh – the Maya Holy Book – as the place of the awakening of the sun. The communities surrounding Shu Sagrib-Al bought the summit of the sacred mountain to protect it from forestry and mining operations and conserve its ecosystems. © Bas Verschuuren

Box 4

Jurisprudence on the recognition of nature and spirits as legal entities

A relatively new set of legal tools is emerging where ecosystems, natural features or protected areas might be given a legal right to be managed well. This may mean that any stakeholder, or in some cases a legally appointed stakeholder, could take legal action on behalf of a protected area, its species or specific natural features (Studley & Horsley, 2019). Recently, an increasing number of jurisdictions have granted juristic personhood to natural features that have special spiritual significance to people. To date this has included (see Studley & Bleisch, 2018):

- · Pacha Mama in Ecuador (2008) and Bolivia (2012), an Earth-goddess and a Huaca (spirit).
- · Te Urewera in New Zealand (2014), the sacred homelands of the Tuhoe people.
- · Whanganui River in New Zealand (2017), sacred to hundreds of Maori Hapu (sub-tribes).
- · Ganges River in India (2017) inhabited by Ganga Ma and sacred to millions of Hindus in and outside India.
- · Atrato River Catchment in Colombia (2017) encompassing the mountains and ten other sacred natural sites of the Emberan people.

The role of spirits inhabiting a natural feature or landscape is common to many indigenous peoples' belief systems. Using juristic personhood, the courts and legislatures have provided a suite of new legal approaches that can be used to strengthen and complement spiritual governance. By protecting natural features, landscapes and waterscapes, the spirits that inhabit them are also protected and hence, their cultural and spiritual significance is safeguarded (Studley, 2019; Studley & Horsley, 2019).



Tenghis-Shishged National Park in Mongolia is home to the Dukhas, the world's southernmost reindeer pastoralists. Although Dukha culture and spirituality are celebrated by the Park, the Park proscribes most subsistence hunting and restricts human and livestock access to pastureland. Dukhas traditionally steward the land, drawing on traditional ecological knowledge, lore and customs that remain flexible and inform Dukhas' religious worship, as well as their respect for sacred places from which resources mustn't be harvested. © Nicolas Rasiulis



Cultural and spiritual significance of nature

3



Kramat Constantia, part of the Holy Circle of Cape Town, protected by the local Muslim community, mainly Malays and from the Indian sub-continent
Twenty holy shrines or graves (kramats), where a holy person is buried, surround Cape Town, forming a kind of large belt of natural sanctuarie
around the city, which, according to local tradition, brings blessings and protects the city against natural disasters. © Goesain Johardie

Cultural and spiritual significance of nature: What does it mean and why is it important?

The cultural and spiritual significance of nature has been defined as the spiritual, cultural, inspirational, aesthetic, historic and social meanings, values, feelings, ideas and associations that natural features and nature in general reveals to and inspires in people - both individuals and groups. Significance is determined by a range of social and cultural factors, and "what is valued by one section of society may not be valued by another, or may be valued for a different reason" (Feary et al., 2015, p. 106). The significance of nature can therefore be based on many different values and the interactions among them can be complex - sometimes they can be in conflict, interdependent or overlapping (see IUCN resolution 4.099; IUCN, 2008). As socially constructed ideas, many heritage practitioners maintain that values of heritage do not simply emanate from the object or place itself but are essentially extrinsic and constructed by people. Environmental philosophers and protected area professionals debate whether these values are embodied in nature, attributed to nature by humans or emerge in the relationships between the two (Harmon & Putney, 2003).

The dichotomy of nature and culture within many Western worldviews has historically had strong influence on nature conservation and cultural heritage conservation practices within and outside modern protected areas. In many other cultures where this dichotomy does not exist, the prevailing worldviews may entail little or no separation between nature, culture and the spiritual realm. For example, the Gimi-speaking peoples in the Eastern Highlands Province of Papua New Guinea believe that they and their forests are created through relationships between people, ancestors and nature. There is no Gimi without forest and no forest without Gimi (West, 2005). Think of how different cultures and religions that have no word for 'nature' deploy a diversity of concepts to explain the natural world more holistically instead, for example, Prakriti (Sanskrit), Khalaq (Hebrew, Arabic), Cosmos (Greek), Zi-Ran, Shan-shui (Chinese). Prakriti in the Samkhya School of Hindu philosophy, for example, is the primal principle of nature that encompasses everything in the physical and mental world including culture (Mallarach et al., 2019). The diversity of concepts of nature is also illustrated by the diversity of languages that have been used to convey non-Western cosmologies and worldviews, see Table 1 (Mallarach et al., 2019).

Table 1. Languages used in widespread sacred scriptures or spiritually relevant texts which do not use the modern Western concept of nature, but instead use concepts of nature that are based on distinct worldviews with diverse ontologies and epistemologies. Source: adapted from Mallarach et al., 2019.

Language	Scriptures conveying worldviews	
Arabic	Quran	
Classical Chinese	Confucian texts, Taoist scriptures, Mahayana Buddhist texts	
Classical Greek	Hellenic Epics and Mythology	
	Commonly used in Australia in the context of land-based networks for conservation	
Hermetic texts	of threatened ecological communities and remnant vegetation. These networks are	
	supported by landowners/land managers and communities (Context Pty Ltd., 2008).	
Coptic	Biblical texts	
Farsi	Mystical Iranian poetry	
Finnish	Kalevala and other sagas	
Gaelic	Celtic sagas	
Biblical Hebrew & Commentaries	Torah, Tanakh and Midrash	
Latin & Koine Greek	Bible	
Pali	Theravada Buddhist scriptures	
Sanskrit	Hindu and Mahayana Buddhist scriptures	
Slavonic	Biblical and Patristic texts	
Tamil	Hindu scriptures	
Tibetan	Vajrayana Buddhist scriptures	

These guidelines are designed to support the consideration and integration of the diversity of worldviews and their concepts of nature into the design, management and governance of protected and conserved areas. For this to be achieved, nature conservation must move beyond the confines of thinking about 'nature' as known through positivism and knowledge systems based on

Western philosophy and ontology. This will allow greater comprehension of the relationships that different cultures have with protected and conserved areas and recognise the ways these places are important to those cultures. For example, the Bakonzo people of Uganda believe that Kithasamba, the spirit who controls nature and the lives of the people, resides in the snowy peaks of the mountains,

his wives live in the moorlands below, while other spirits inhabit the forests, rivers and springs. The King of the Bakonzo is responsible for controlling human access to the domains of the different spirits (Masereka, 1996). Another more universal example illustrating the need to adopt a pluralistic approach towards understanding worldviews is found in the conceptualisation of time. The linear concept of time prevalent in the modern world is not shared by a large number of cultures and worldviews. In fact, different cultures have different concepts of time which can be cyclic, spiralled, spherical, etc. (see image 6 where 12 swirling circles are visual representations of time in this Buddhist cosmology). Both Buddhist and Hindu cosmologies share a cyclical view of time as the endless repetition of four yugas or aeons, descending from the perfect Satya Yuga or golden age at the beginning of each cycle to the degenerate Kali Yuga or black age at the end of the cycle.

In some protected areas, worldviews and particular cultural practices and values can conflict with nature conservation objectives such as, for example, the protection of a particular plant or animal species. Such conflicts can undermine conservation programmes and weaken relationships between important interest groups and protected area managers. While in cases of conflict, the protected area definition clearly gives primacy to natural values, we emphasise that misunderstanding about different worldviews and disagreement about values and uses of nature in protected and conserved areas are one of the motivations for developing these guidelines. Indeed, the guidelines address the diverse values and perspectives that people attribute to nature, and underline how critical it is to work through those differences (see IUCN resolution 4.099; IUCN, 2008).



A mural in a Bhutanese monastery depicts the Buddhist cosmology or world system according to the Kalacakra or Wheel of Time teachings. In the centre, viewed from directly above, is Mount Sumeru, a cosmic axis, 80,000 yojanas high (a yojana is 12 to 15 kilometres), reaching from the depths of hell up to the North Star and heaven above. The 12 circles swirling around the centre, looking like the orbits of electrons or planets, represent aspects of time. © Edwin Bernbaum

Intangible cultural heritage

Intangible cultural heritage is a widely used, complex and evolving concept that is understood differently by many groups. The UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) defines intangible cultural heritage as:

The practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith - that communities, groups and, in some cases, individuals recognise as part of their cultural heritage ... This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity... (UNESCO 2003, article 2 & 3).

Such heritage may be manifested in domains such as oral traditions and expressions, performing arts, social practices, rituals, festive events, traditional craftsmanship as well as 'knowledge and practice about nature and the universe'.

The 2003 Convention considers the interdependence between intangible heritage and tangible cultural and natural heritage. Moreover, it explicitly recognises communities as central agents in the production, safeguarding, maintenance and re-creation of the Convention, and thus enriching cultural diversity and human creativity. In this respect, the Convention builds on the Nara Document of Authenticity (ICOMOS, 1994) which highlighted the importance of cultural heritage diversity, observing that it exists in time and space and demands respect for other cultures and all aspects of their belief systems (ICOMOS, 1994, Article 6).

Essentially, all values (Box 5) are by definition intangible and therefore their use in World Heritage has resulted in a distinction between values and attributes. In these guidelines, we use intangible cultural heritage in the context of cultural and spiritual significance of nature, bearing in mind that the concept of significance goes beyond sets of values and also includes importance, knowledge, meaning, and relationships that extend to nature and

natural elements that are not explicitly included under the Convention for the Safeguarding of the Intangible Cultural Heritage such as beauty, silence, tranquillity and harmony (Mallarach et al., 2012). Beauty (and more broadly aesthetics) can also extend over multiple natural elements or a whole landscape and differ between individuals and cultures but are nonetheless a key factor in our appreciation of protected and conserved areas.

Box 5

Values, significance, attributes and authenticity

The notion of value is one of the fundamental ideas in heritage conservation (tangible as well as intangible cultural heritage). The term 'values' is most often used in one of two senses: first, as morals, principles, or other ideas that serve as guides to action (individual and collective); and second, in reference to the qualities and characteristics seen in things, in particular the positive characteristics (actual and potential) (de la Torre, 2002, p. 7). The second definition is the most relevant to heritage conservation, as values refer to the qualities and characteristics assigned by people to an object, a feature or a place, be it a building, a landscape, a forest, or a mountain. Therefore, the values of heritage are not simply inherent to the object or place itself but are also extrinsic and constructed by people.

As socially constructed meanings, values are determined by a range of social and cultural factors, and "what is valued by one section of society may not be valued by another, or may be valued for a different reason" (Feary et al., 2015, p. 106). A place can therefore have many different values and the interactions among them can be complex – sometimes they can be in conflict, coexist, interdependent or overlapping.

Values are often equated with significance. The term significance is generally used to refer to the sum of all the heritage values assigned to an object or place and its assessment "is often conducted at several scales: international, national, regional and local" (Feary et al., 2015, p. 107). That is, significance refers to the meanings and values that make a natural or cultural feature, place, landscape or waterscape important. In turn a significance assessment is a process of studying and understanding the meanings and values of a place and is typically the basis for developing policy to inform and guide the management and governance of that place. Significance in these guidelines is taken to include knowledge of the natural world that is also needed as a basis for developing policy to inform and guide management and governance, along with scientific knowledge.

As cultural constructs, values are not tangible. An object or place conveys its values through certain attributes. Attributes can be physical elements, relationships between physical elements, essence, meaning, and at times related processes, that need to be protected and managed in order to sustain the values of the place (ICOMOS et al., 2010: p. 6). In World Heritage terms, for example, attributes are said to 'carry' Outstanding Universal Value (UNESCO, 2017).

Typically applied in the context of cultural heritage, the concept of authenticity concerns the ability of the attributes of a cultural heritage place (or property) to convey its values (Stovel, 2007). That is, authenticity refers to:

The relative truthfulness of the property in relation to its values and the evidence provided to establish them – in other words, the degree to which the place can credibly convey its claimed values and meanings. Increasingly, authenticity is understood as resting on the transmission of the intangible and spiritual dimensions of culture, rather than on their physical manifestations alone (Buckley 2019).

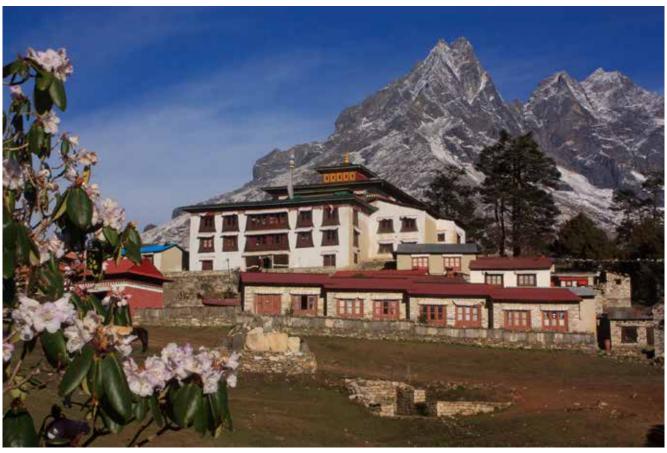
Current explorations on applying authenticity to nature conservation challenge cultural and natural heritage practitioners:

Could authenticity be a small but helpful piece of the larger project of connecting practices between the two realms of nature conservation and cultural heritage? The global systems for protected areas have also expanded in recent decades to recognise a greater diversity of ways of designating, governing and managing landscapes and seascapes. Protected areas therefore provide a useful meeting point for this conversation, with the potential for better and more equitable "on-the-ground" outcomes for people, reflecting their cultural perceptions, beliefs, lifeways, and experiences (Buckley 2019).

Contributors: Letícia Leitão, Steve Brown and Bas Verschuuren



The monastery of Alaverdi of the Orthodox Church in Georgia. Beyond the cathedral and other religious buildings, the monastery is set in a cultural landscape with significant natural and agricultural properties, including over one hundred grape varieties which are endemic to the Caucasus. © Josep-Maria Mallarach



Tengboche Monastery & Khumbila Sagarmatha NP, Nepal. @ Edwin Bernbaum

What is significance-led conservation?

To understand significance-led conservation one has to understand how the role of cultural and spiritual values and significance of nature are both related and different in the management of protected and conserved areas (Box 6). For an extended explanation of this, see Brown and Verschuuren (2019). While values are generally known to relate to tangible aspects of nature and natural features, they are also related to intangible aspects of cultural practices and beliefs associated with nature and natural features. Cultural values for example can include spiritual values alongside aesthetic, historic, scientific, and social values (Australia ICOMOS, 2013, Article 1.2). In other cases, the reverse is true: spiritual values can include or give rise to cultural values or deeply influence them. For example, a key point of discussion among protected area professionals is whether these values are embodied in nature, attributed to nature by humans or emerge in the relationships between the two (Harmon & Putney, 2003).

In the definition of significance used in these guidelines we include not only values, but also knowledge, meaning, feelings, ideas and associations. Significance-led conservation then, is conservation that is informed and guided by the values, knowledge, meanings and feelings that nature inspires in people - individuals and groups in natural features and nature in general. This is different from conservation that is based predominantly on natural sciences and knowledge with a strong focus on biodiversity or the economics of biodiversity. As mentioned earlier, these approaches often create a nature-culture dichotomy where humans are generally separate from nature and can therefore manage or consume nature without any reciprocal impact on humans. These guidelines suggest to put the cultural and spiritual significance of nature as it is known throughout a wide diversity of worldviews around the world at the core of the governance and management of protected and conserved area.

Different disciplinary and professional fields such as 'cultural' and 'natural' heritage conservation are not monolithic but rather hold different and diverse perspectives and definitions on values and significance. Even within the field of protected areas governance and management, there are various approaches and a universal definition, typology and assessment strategy for values and significance is still lacking. In part this is due to values and value typologies being to a great extent culturally, spiritually and religiously determined. This is exemplified in the Nara Document on Authenticity (ICOMOS, 1994) which states that "it is thus not possible to base judgments of values and authenticity within fixed criteria. On the contrary, the respect due to all cultures requires that heritage properties must be considered and judged within the cultural contexts to which they belong" (Article 11). However, for the purpose of these guidelines, those cultural practices that support and do not conflict with the natural values that are given priority under the current IUCN protected area definition

are more likely to be supported than those that do not. In other words, there is an overarching set of values and assumptions which form part of the dominant ideology guiding protected area management and governance that assumes that for 'conservation' to be occurring, these values have to overrule other values that conflict with them.

A popular approach to support governance and management decisions in protected areas is through applying the concept of ecosystem services and their valuation. In this utilitarian and neoliberal economic approach, cultural values are conceptualised as an 'ecosystem service' delivered by nature to humans. The consequences of adopting such a utilitarian perspective are very serious especially where this affects particular cultural groups. Moreover, such consequences are too often missed by conservationists who perhaps unwittingly appropriate culture to their own ends. In ecosystem services theory, for example, culture is conceptualised as a 'cultural ecosystem service' which includes; spiritual, aesthetic, expressional, historic and therapeutic values or experiences (MEA, 2003). Following its broader introduction in the Millennium Ecosystem Assessment in 2003, the ecosystem services approach and its inherent typology has also been applied to evaluate cultural values in terms of 'benefits' of protected areas (Infield et al., 2015). IUCN WCPA has published a Best Practice Guideline that offers tools for measuring, modelling, and valuing ecosystem services in protected areas (Neugarten et al., 2018).

While the ecosystem services approach can be a useful tool in the management and governance of protected areas (Stolton et al., 2015) it doesn't recognise multiple worldviews and cultural conceptions of value and valuation of nature (Mallarach et al., 2019.) Nonetheless, the perspective has changed in such a way that multiple cultural knowledge systems have now been included in biodiversity assessment within the framework of the International Platform on Biodiversity and Ecosystem Services (IPBES, Box 6).

From an external perspective, any valuation system that establishes cultural significance, like the heritage system, appears robust and objective – being based on well-established and mandated assessment criteria. These criteria are also part of a plethora of international and corresponding national legislation, policies and guidelines. However, from a practitioner perspective, there can be a considerable degree of subjectivity about the interpretation of criteria and nature-culture interlinkages involved. This complexity makes significance-led conservation reliant on inclusive and transparent processes that these guidelines aim to support.

Assigning values is in itself not a neutral or objective exercise (Jepson & Canney, 1999). In World Heritage sites for example, *significance* is derived from a group of *values* which are underpinned or carried by *attributes*. In turn, attributes – also termed features – are tangible (e.g. specific mountains, rivers, trees or whole landscapes or

Box 6

IPBES: People's contributions to nature

The IPBES has demonstrated the need for conceptual biodiversity assessment framework based on values that is capable of incorporating a diversity of value typologies with respect to different cultures and worldviews (see image 7). This meant broadening out from the ecosystem services framework previously used in the Millennium Ecosystem Assessment and a variety of neoliberal economic conservation approaches. The resulting conceptual framework (IPBES 2016):

... provides an integrated view of the biodiversity knowledge - policy interface, stimulates new thinking, accommodates diverse human attitudes to biodiversity, and at the same time is as simple as possible to be effective and useful for the diverse array of stakeholders (IPBES 2019, p. 11).

Ecosystem services are no longer treated as a panacea but rather they are seen as one of many possible approaches under nature's contributions to people.

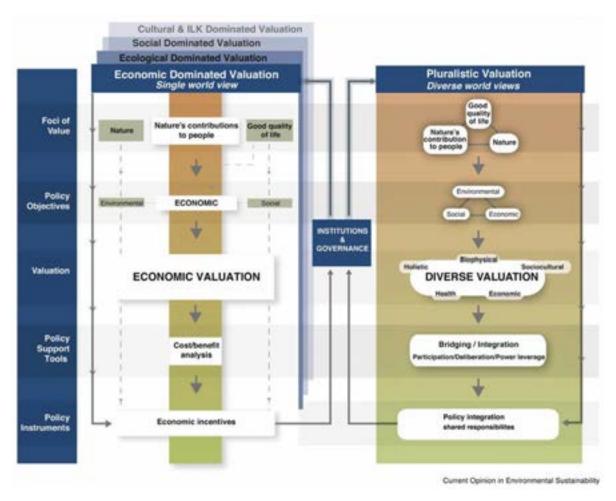


Figure 1. A stylised illustrative framework of contrasting approaches to the process of valuation. The right-side panel emphasizes the importance of a pluralistic valuation approach, compared with value monism or unidimensional valuation approaches to human-nature relationships represented in the left side panel (Pascual et al. 2018).

waterscapes) and intangible (e.g. festivals, processes of transmission of arts and crafts, and traditional knowledge, etc.) that convey values (UNESCO, 2011b, pp. 59-60; Brown & Verschuuren, 2019). The attributes or processes and the values attributed to them by communities are assessed for the importance that they have at the global, national, regional and local community level or even the individual level. This is an approach that can help to relate values to

tangible and intangible heritage that then becomes the focus for conservation. This approach is also congruent with the IUCN Green List of Protected and Conserved Areas (IUCN WCPA, 2017, pp. 38-39, 43). It not only brings clarity and transparency to the process but, like every approach, the implementation and involvement of key players is the test for it delivering successful conservation outcomes.

What types of values do we identify?

The elements and values that make up the cultural and spiritual significance of nature vary depending on the culture and worldview, are highly context dependant and can change over time. For the purpose of these guidelines, a general classification of values is presented that is broadly applicable and can be used in protected and conserved

areas. It is based on the classification of the Convention for the Protection and Safeguarding of the Intangible Heritage (UNESCO, 2003), the Millennium Ecosystem Assessment (2003) and the Manual on the Intangible Heritage, including Cultural and Spiritual Values in Protected Areas of Spain (Mallarach, 2012). The different classes and typologies presented are not mutually exclusive and can be tailored to fit a specific context and needs (Table 2).

Table 2. One possible classification of values that make up the cultural and spiritual significance of nature in protected and conserved areas.

Values	
Values	Tangible and intangible attributes and qualities that convey those values
Aesthetic, perceptual or scenic	Beauty, silence, tranquillity, harmony: These qualities are typically directly experienced in relation to nature or natural features, for example, the beauty of a landscape, but also in relation to the experience of nature, the sensorial experience of smelling the sea or hearing the wind rustling through leaves. Other qualities related to nature and natural elements can include intangible cultural heritage such as a 'beautiful song' or a painting about the sea.
Recreational, health and therapeutic	Mental and physical well-being: People visit nature because it makes them feel better, to re-create themselves and to feel whole again. Think about ecotourism, the practitioners of outdoor sports, playing games, doing contemplation or meditation, and the visitors of healthy and therapeutic forests (for example Shinrin-yoku, which have spread from Japan to South Korea and now many other countries in the world), thermal waters, wells and sea sides, who come to nature for healing, short, nature's effects on human health and well-being in all its dimensions: preventive, therapeutic, rehabilitative and palliative. A good example of work in protected areas focusing on these values is part of the Healthy Parks Healthy People movement (HPHP Central, 2018).
Artistic, traditional and contemporary	Performing arts, music and dance: Inspired by nature, natural features or life and activities in nature or related to the natural cycles of nature-based livelihoods such as agriculture, fisheries, agroforestry and pastoralism. Literature, poetry and prose: Expressions that communicate sense of beauty, mystery and harmony found in nature and have influenced the social value of certain natural places or landscapes in favour of their conservation. Decorative arts: The expression of nature in items made for everyday or ceremonial use such as clothes, jewellery, materials, pottery, etc. Visual arts, landscape painting, installation and landscape art, nature photography, movies and television shows, etc.: The use of nature as a source of inspiration and recreation but also serve to raise awareness and offer reflection on the values of nature while stimulating people to conserve nature.
Information, knowledge and education	Scientific knowledge is based on observations of species, geological formations and landscape, and by monitoring the environment. Scientific knowledge is devised under different scientific ontologies and paradigms, but can be assessed with the help of other stakeholders. Think, for example, of citizen science and the perceptions of visitors of protected areas or traditional ecological knowledge based on empirical observations throughout many generations. Educational value of particular ecosystems, environmental conditions, the climate, natural features and attributes or specific species and their behaviours. Educational values can be communicated through, for example, on-site interpretation, guided walks, and through schools and conservation organisations.

	<u></u>
Historical, ethnological	Traditional knowledge, customs, law and governance: Linked to different aspects of culture and society, knowledge systems reflect worldviews, but also contain the basis for good governance and the creation of traditional institutions, laws, norms and for the management of natural resources that have lasted for centuries or millennia. These may include the roles of shaman, spirit masters, trance mediums as well as traditional forms of organisation based on diverse communities: clan, kin and family. Traditional practices and trades: These have shaped livelihoods and cultural landscapes and are necessary for their maintenance and for maintaining production and sustainable use of nature: grazing, fishing, beekeeping, agriculture, agroforestry, traditional healing, seed saving, animal husbandry and the extraction of natural materials for constructing, such as dry-walling, roof thatching, boat building, etc. Festivals, fairs and historical events: Linked to nature, natural events such as animal migration, the remembrance of natural disasters, rain making ceremonies or historical events linked to nature, landscapes or waterscapes. Gastronomy and food cultures: Linked to nature these food cultures refer to rural modes of production, for example harvest festivals, and with them the recipes of cuisine based on local products and ways of preserving and preparing food.
Linguistic traditions, both written and oral	Languages or dialects: Lexical richness provides description in greater detail of particular elements or aspects of nature, for example crops, meadows, forests, and ecosystems of a specific area, as well as changes the conditions of the sea, climate and local populations. Vocabulary related to nature; place names and their etymologies: Language as a means of knowing one's environment reveals much knowledge about nature and local places, which may also help recover ancient or vanished knowledge, including former particular relations with natural places. Traditional folk-tales, legends, proverbs, epics and songs: Linked to the protected and conserved areas, these often transmit a wisdom derived from the natural world developed over long and evolving human nature relationships.
Religious and spiritual	Natural elements considered holy, sacred, magical or mythical (sacred natural sites and species): Caves, mountains, springs, islands, rivers, trees, animals or even whole landscapes and waterscapes can be imbued with spiritual, religious or magic significance from the present or the past. Built and living religious heritage set in a natural environment: Monasteries, sanctuaries, temples, hermitages, shrines, chapels, tombs, etc. including their natural surroundings, as well as trails and paths linked to them. Rituals, ceremonies and pilgrimages: Set in the natural environment, these activities celebrate a spiritual quality of nature and signify its role in religious and spiritual experience of nature.



Principles, guidelines and examples

4



Practitioners of Shugendo at the beginning of a ritual ascent of Mount Fuji, Japan. © Edwin Bernbaum

Principles

The following overarching principles offer a foundation for the implementation of the more specific best practice guidelines on the cultural and spiritual significance of nature that apply to particular stakeholders, as well as specific indigenous, cultural and religious groups, their values and the attributes and ecosystems they relate to. The principles presented here are not intended to be hierarchical or sequential, but rather can be applied as required or relevant in relation to each particular situation:

1. Respect diversity

Recognise, respect, acknowledge and include the diversity of expressions of the cultural and spiritual significance of nature, as expressed in people's relationships, connections and associations with the landscapes, waterscapes and natural features inside, connected with and surrounding protected and conserved areas.

2. Build diverse networks

Recognise the full potential that the cultural and spiritual significance of nature can play in creating and cultivating networks of support among diverse groups of people, enabling revitalisation, resilience, and strengthening of the management and governance of protected and conserved areas.

3. Ensure safety and inclusivity

Create an informed and safe environment for all stakeholders, as well as specific indigenous, cultural and religious groups, in which culturally appropriate and inclusive processes enable the best possible governance, design and management arrangements and outcomesbased conservation with regard to maintaining, revitalising and restoring cultural or spiritual relationships within protected and conserved areas.

4. Account for change

Be mindful that culture, religion, spirituality, and aesthetic values and significance may change with time and place; and may only become apparent when protected and conserved areas are seen as embedded within wider cultural, historical and socio-economic networks.

5. Recognise rights and responsibilities

Adopt a holistic approach that recognises the multiple responsibilities and rights of stakeholders and rights-holders, and that encourages dialogue and reciprocity amongst all parties concerning the mutual recognition of the cultural and spiritual significance of nature.

6. Recognise nature-culture linkages

Contribute to recognition of nature-culture linkages through education, practice, arts, humanities, and literature as well as by providing a role for the cultural and spiritual significance of nature in the conservation of natural and cultural heritage, wherever this may be useful to improve sustainable and equitable conservation approaches.

Guidelines

Table 3. Best Practice Guidelines on the Cultural and Spiritual Significance of Nature in Protected and Conserved Areas (presented in 12 thematic groups with in total 41 guidelines).

tant stakeholders.
eam religions, and
areas by
es.
rs and custodians
n-making
ed and conserved
s-holders are
ured.
spiritual significance
spects of heritage,
finding consensus.
nd cultural
at have perceived
Iltural and spiritual
Glossary) are
attributes and
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
e) throughout
1 1
d and conserved
that incorporate
s that incorporate
rea are included
ica are included
particular attention
sent are applied in
στι αιο αρρίισα ΙΠ
ne official
o omoidi
ect an appropriate
p

7	Planning for protected and conserved areas.	
7.1	Develop locally appropriate approaches to assessing and integrating the cultural and spiritual significance of nature into planning,	
	regulation, zoning and design, including at the systems level.	
7.2	Adopt planning tools and policies that recognise the diversity of coexisting natural, and cultural and spiritual values in the	
	management planning processes.	
7.3	Deploy appropriate processes and methodologies in planning to identify and maintain relationships with stakeholders related to the	
	cultural and spiritual significance of nature.	
7.4	When the existing planning does not take into consideration the cultural and spiritual significance of nature, develop a strategy to	
	include it as much as possible.	
8	Management implementation in protected and conserved areas.	
8.1	Ensure that management reduces threats and impacts to nature while revitalising the cultural and spiritual significance of nature.	
8.2	Ensure that protected area management teams include and collaborate with people who have in-depth knowledge and	
	understanding of the cultural and spiritual significance of the natural area.	
8.3	Integrate and promote a diversity of knowledge, beliefs and expertise concerning the cultural and spiritual significance of nature into	
	management policies, knowledge systems and programmes.	
8.4	Promote participation and volunteering of the public, in the protection, conservation and safeguarding of cultural and spiritual values	
	of nature as an integral part of management implementation.	
9	Interpretation in protected and conserved areas.	
9.1	Use interpretation of the cultural and spiritual significance of nature to inspire and enrich visitor experience by engaging visitors as	
	active participants.	
9.2	Develop interactive, dynamic interpretation based on, and respect for, different kinds of knowledge, values and visions for the place;	
	encourage diverse types of expression such as art, stories, song, music, games and dance.	
9.3	Promote the establishment of meaningful cultural connections with nature through interpretation that enhances experiences of	
	solitude, quietness, silence, impression and expression.	
10	Public use, visitation and engagement in protected and conserved areas.	
10.1	Cultivate the cultural and spiritual connections of local and non-local – including secular – stakeholders with nature to ensure their	
	participation in the safeguarding of protected and conserved areas.	
10.2	Draw on knowledge and experiences of the cultural and spiritual significance of nature to motivate members of the public to	
	contribute to organisations that support protected and conserved areas and promote conservation generally.	
10.3	Engage support for conservation through public interest in historical and contemporary figures who have promoted and contributed	
	to the enhancement of the cultural and spiritual experience of nature.	
11	Monitoring and evaluation in protected and conserved area management.	
11.1	Ensure that monitoring and evaluation mechanisms encompass the key attributes, values and qualities in relation to the cultural and	
	spiritual significance of nature in protected and conserved areas.	
11.2	Ensure collaborative, participatory methods for implementing and improving the monitoring of the cultural and spiritual significance	
44.0	of nature.	
11.3	Communicate and integrate decisions based on monitoring and evaluation results into the planning and management cycle of	
44.4	protected and conserved areas, including reports and periodic evaluations.	
11.4	Evaluate the achievement of goals related to the cultural and spiritual significance of nature, taking into consideration the level of	
10	satisfaction of the relevant stakeholders and groups.	
12 12.1	Adaptation and scaling of protected and conserved areas. Promote the use and adaptation of these guidelines, at the system level of protected areas, when organisations review their own	
14.1	guidelines about the establishment, planning and management of protected areas.	
10 0	Identify opportunities for improving the governance and management of the cultural and spiritual significance of nature through	
12.2	regular large landscape-scale monitoring and evaluation.	
12.3	Review and adapt the governance and management approaches of protected and conserved areas in the context of their wider	
12.0	landscapes and waterscapes based on knowledge of existing cultural and spiritual linkages.	
	panuscapes and waterscapes based on knowledge of existing cultural and spiritual linkages.	

Guidelines 1 Identify all groups concerned in the conservation of particular protected and conserved areas

The key message of these guidelines is to recognise and enable the roles of key groups and rights-holders including indigenous peoples, religious groups and the public, who have an interest in or are responsible for the cultural and spiritual significance of nature in the governance and management of protected and conserved areas. Relationship building begins with the identification of key stakeholders and groups and with implementing processes that are respectful and inclusive of cultural values and norms to engage these communities of interest in the process.

The context in which relationships are built is important and can lead to different opportunities and obligations, for example, in an existing protected area or for the designation of a new one. The related legal context for building relationships and convening groups of stakeholders is also key: Under what authority is the group operating? Will it be advisory only or will it be part of a planning process?

It is also important to clarify who is doing the convening and why, particularly if it is being undertaken by the governance

body in conjunction with other stakeholders and rightholders. In this context the length of time of the engagement needs to be explained and discussed: Is it a one-time gathering or does this lead to a long-term group effort?

Identifying or naming all key groups and rights-holders may be complex, in some cases, as they may simultaneously incorporate multiple identities. Some groups may have been displaced from a protected area, but still hold strong associations with particular sites within it, while other groups may be new to the place but claim relationships with it. An example of such is illustrated by research undertaken in Australia which is an ethnically diverse society of approximately 24 million people and comprised of people with more than 300 different ancestries. The New South Wales National Parks and Wildlife Service has undertaken research within protected areas to understand how different migrant communities relate to park landscapes form a cultural perspective (Byrne & Goodall, 2013). Such work has been undertaken with Macedonians. Vietnamese and Arabic-speaking communities. The research has explored ways in which these different migrant groups adapt their homeland cultural relationships with open spaces and natural environments to the Australian environment (Byrne & Goodall, 2013). These cultural groups have been identified as key stakeholder groups with cultural and spiritual values related to the protected area who should be directly engaged and consulted in planning.



Cambodian Buddhist monks from the Monks Community Forest (MCF) in Oddar Meanchay province ordain a tree as a Buddhist monk in order to prevent illegal logging in the forest. This act is based on a Buddhist teaching that the Buddha could appear as a man, a woman, a dog, or a tree, for example, if any of these helped people achieve enlightenment. © Chantal Elkin and the Community Forest Monks, Cambodia.

1.1 Recognise that all people who value the area culturally and spiritually, no matter how distant they are from it, will be important stakeholders.

Example: The Kailash Sacred Landscape Conservation and Development Initiative is a transboundary conservation and development programme aimed at landscape scale conservation in an area of 39,000 km² in the Eastern Himalayas covering parts of Nepal, India, and Bhutan (Pandey et al., 2016). The area has a population of over 5 million people speaking 40 languages and includes various combinations of Buddhism, Hinduism and local spiritual traditions. Its extraordinary natural, cultural and spiritual values are included in the management planning. It aims at safeguarding the biological and cultural values of the world's highest mountains and deepest valleys as well as the rights of the local population while maintaining and improving their means of subsistence. Toward accomplishing these ends, the initiative is doing research and conducting meetings and workshops with stakeholders to determine if they desire World Heritage status and to include them in the process of nomination, as well as assisting states parties in nominating pilgrimage routes and sacred sites of the Kailash Sacred Landscape as an UNESCO transboundary World Heritage Site, and developing the management plans and systems needed for the nomination.

1.2 Enable an inclusive process for maintaining relationships with all groups – including indigenous peoples, mainstream religions, and members of the general public and the organisations through which they are served.

Example: Black Canyon Participatory Interpretive Planning Project is a six-year collaborative effort among seven indigenous Native American tribes of Nuwu/Nuwuvi or Southern Paiute/Chemehuevi (known to make up the Nuwu/Nuwuvi Nation), local settlers and the United States Fish and Wildlife Service at Pahranagat National Wildlife Refuge, Nevada, United States. Facilitated by The Mountain Institute and Portland State University, this project incorporated multiple ways of knowing into trail design and public education to protect the natural landscape as well as more than 100 petroglyphs and pictographs (Spoon & Arnold, 2012). The collaboration includes acknowledging the rights and responsibilities of each stakeholder group (CSVPA, 2018b). The collaborative working process required each stakeholder group to envision the way landscape could be best presented, and then working together to incorporate the various visions into a single design (Spoon, 2014).



Tibetan pilgrims who have travelled from distant parts of Tibet approach the Drolma La, at 5650 meters. This is the high point of the ritual circumambulation of the most sacred mountain of the world for at least a billion people in Asia, Mt Kailash, to leave a part of themselves – such as a lock of hair – symbolizing their aspiration to relinquish attachment to self in order to attain enlightenment for the sake of others. © Edwin Bernbaum

1.3 Involve religious and customary rights and stakeholders, and their institutions, in the governance and management of protected and conserved areas by recognising and entrusting clearly defined management responsibilities and stewardship roles.

Example: Plan de vida Asatrizy is an integrated plan based on the worldview of the traditional authorities of the indigenous communities of the Yapú district in Amazonian Colombia. It aims to establish an autonomous government in a territory recognised by the Colombian government. The Association of Indigenous Authorities of Yapú (Asatrizy) is part of the Great Eastern Indigenous Reserve of Vaupés, a region of 3.35 million ha whose autonomous status was officially recognised in 1982. The Plan de vida Asatrizy covers six fields: health, education, family, women and housing, food and subsistence, and territorial organisation. This strategic plan provides a series of qualitative objectives accompanied with ideas and strategies for implementation to achieve those objectives (Borrini Feyerabend et al., 2013, pp. 43-44).

1.4 Recognise and support indigenous peoples' right to self-determination by acknowledging that they are the owners and custodians of their cultural heritage, inclusive of rights to maintain customary governance, traditional institutions and decision-making processes. Example: Uluru-Kata Tjuta National Park in Central Australia is a cultural landscape inscribed on the UNESCO World Heritage List. Its inscription was broadened from a natural site (1987) to a mixed natural and cultural site (1994), reflecting the evolving understanding and thus recognition of the values of the place. This iconic sacred site is an integral part of local Anangu cultural and spiritual traditions, creation stories and customary law (Tjukurpa). Declared a National Park in 1977, the Park was handed back to the Anangu Traditional Owners in 1985 when co-management arrangements were made between the Anangu and the Australian Federal Government. Aboriginal traditional knowledge, including traditional burning practices, has increasingly been applied to the ecological management of the Park (Director of National Parks, 2010). Significant changes have been made to better align commercial tourism with Anangu customary governance, including closing and replacing the climbing track to the top of Uluru (October 2019) with culturally appropriate walks and alternate visitor experiences.

Guidelines 2 Create common ground for different worldviews of stakeholders engaged in the conservation of protected and conserved areas

Building relationships should take place in an environment that is inspiring, respectful, safe and where all groups involved are able to contribute to a meaningful dialogue in which their worldviews – including the cultural and spiritual significance of nature - are recognised and considered.

Such an environment can be seen as a common ground, a basis for cross-cultural and interdisciplinary approaches required for promoting and integrating the cultural and spiritual significance of nature into protected area management and governance. In order to create such common ground, it may be necessary to develop synergies and expand cooperation between institutions (exemplified in the establishment of peace parks and transboundary World Heritage sites), depending on the degree of existing threats to the conservation of interlinked nature and culture.

Many protected areas are developed and run by secular organisations and by institutions that take the natural sciences as the basis for validating governance decisions and management actions. When taking an interdisciplinary approach, biology, ecology, forestry and other natural disciplines can be complemented with sociology, anthropology, geography as well as disciplines from the humanities such as philosophy and art history. One of the big questions is whether interdisciplinarity should come through (a) retraining/exposure of scientists/ knowledge holders in different disciplines/worldviews; or (b) to encourage more specialised disciplines/knowledge systems to dialogue with one another. We value both approaches and encourage protected area managers to contribute to these approaches and wherever possible help create linkages between them.

These guidelines promote the recognition and inclusion of a diversity of knowledge systems that include cultural and religious ways of knowing and creating knowledge about what is to be governed and managed (see Box 6). Western knowledge systems and positivist science have the tendency to co-opt processes in the interest of efficiency, streamlining and coming up with tangible deliverables. Processes that encourage interdisciplinary and intercultural representation and facilitate meaningful dialogue and mutual understanding require a serious rethinking of process itself - in terms of anticipated timelines, deliverables and what might be seen as outcomes. A respectful and honest process can help to build trust and, when required, reconciliation between different stakeholders. As such, the process itself is a major positive outcome, and a beneficial 'intangible deliverable'.

Indigenous protected areas are often based on cultural knowledge systems and traditional law that are based on indigenous worldviews and practices. Monastic landscapes have been conserved in diverse ecosystems for centuries according to religious and spiritual principles that inspire duties and sacrifices that go beyond practical goals (Mallarach et al., 2016). Both indigenous protected areas and monastic landscapes combine the use of interdisciplinary approaches with their own ways of knowing in order to achieve successful conservation outcomes as part of a range of other aspects that contribute to their well-being. Even within modern Western cultures, there are diverse views of nature as a source of artistic, literary, and personal inspiration that springs from protected areas.



Youth queue to get blessings from spiritual leaders at the Watunakuy seed diversity ceremony: an example of overlapping material, social and spiritual dimensions of well-being in biodiverse landscapes of production and conservation in Peru. © Wim Hiemstra

2.1 Create a safe environment for working together and ensure that ancestral, traditional, cultural and religious rights holders are recognised, will not be expelled from spiritually significant areas and where possible have title to their lands secured.

Example: Nuwu/Nuwuvi (Southern Paiute/Chemehuevi) consider their ancestral territory alive and imbued with power. They have been the custodians of these lands for an untold number of years.



Nuwu/Nuwuvi working group and facilitator conduct interpretive planning at Desert View Overlook, Spring Mountains National Recreation Area, Nevada, USA. © Bob Loudon

Protected and restricted areas include large portions of the lands, which span four western U.S. states. The Spring Mountains National Recreation Area and Desert National Wildlife Refuge Complex are key landscapes in Nuwu/Nuwuvi creation and contain habitats for numerous culturally and spiritually significant plants, animals, and other natural features. Since 2008, Nuwu/Nuwuvi, U.S. Forest Service and U.S. Fish and Wildlife Service collaborated on a shared governance framework using groups of tribally and federally designated representatives. Lessons learned include the importance of rapport building with transparency between indigenous people and government agencies and using co-stewardship activities to reunite indigenous people with their ancestral territories and reinforce intergenerational knowledge transmission (CSVPA, 2018b; Spoon, 2014; Spoon & Arnold, 2012; Barcalow & Spoon, 2018).

2.2 Promote mutual respect, appreciation, dialogue and joint understanding drawing on the diversity of cultural and spiritual significance that nature has for different groups in protected areas.

Example: In 2016, the Tasmanian Wilderness World Heritage Area (TWWHA) became the first jointly managed protected area in Tasmania, Australia (DPIPWE, 2016). Indigenous people were able to take a leadership role in addressing the government agency and conservation stakeholder neglect of the cultural Outstanding Universal Values by reinstating the importance of the sacred and spiritual connections to the TWWHA country (Lee, 2016). Through welcoming a broad range of opinions and values that other people have with TWWHA country, indigenous people created a low-conflict resolution to accessing natural and cultural resources for their use, as well as a formal role in their management through a cultural management group (see Case study 5.6, Part 5 and CSVPA, 2018a).



Needwonnee country, a part of the Tasmanian Wilderness World Heritage Area, Tasmania, Australia, © Jillian Mundv

2.3 Promote cooperation between stakeholders that is grounded in participation and consensus building processes in order to prioritise management actions related to the diverse aspects of heritage, its multiple perceptions and stakeholder groups.

Example: Jordan River Valley ecosystem restoration project, launched by the regional NGO EcoPeace, is an example of faith-based advocacy in promoting the rehabilitation and preservation of the shared natural and spiritual heritage of an outstanding holy river, with a watershed shared by three countries with conflicting relations: Israel, Jordan and Palestine. The Jordan Covenant (Save the Jordan, 2013), serves to establish stronger human-nature relations but also to foster interpersonal connections across political divides. In addition, EcoPeace also developed three separate toolkits for Christian (Adamson, 2013a), Islamic (Adamson, 2013b), Jewish communities (Adamson, 2013c), and Abrahamic traditions, to assist in rehabilitating the Jordan river by proposing bold environmental restoration actions.

Guidelines 3 Consensus building and conflict resolution in managing protected and conserved areas

When building and maintaining relationships amongst groups, common ground is often built through an understanding of different points of view. When the interests of stakeholders diverge, conflicts may arise. Although conflicts may lead to processes of learning and mediation, situations should be handled so that they do not create or develop into conflicts. When conflicts do arise, they should be acknowledged, respected and receive careful attention and handling, so that they do not harm or negatively impact on the primary objectives of protected area management. For example, the arts can be used to bring people together and help people see and understand priority issues from a different perspective while not directly being antagonised by the views of others. When using the arts in facilitation techniques, a workshop setting can help reconcile conflicts that might otherwise hamper conservation objectives.

In other instances, conflicts can be avoided by improving cooperation, and these guidelines can contribute to achieving this through the systematic inclusion of the cultural and spiritual significance of nature in existing management plans. Across central Italian National Parks such as Gran Sasso and Monti della Laga, Majella, and Monti Aurunci, folkloric and religious events such as processions and festivals do not appear immediately aligned with conservation goals (see Case study 5.5 and CSVPA, 2018f). The intimate relationships with and use of wild animal and plant species, the cultivation and grazing of conserved landscapes and the traditional knowledge needed to maintain them all warrant specific efforts by protected area managers. These guidelines could be used as a source of inspiration and help identify cultural and spiritual uses and accord relevant stakeholders and their values adequate recognition in governance and management (Frascaroli & Fjelsted, 2019).

3.1 Seek to resolve conflicts by ensuring that the cultural and spiritual significance of nature is part of the process of finding consensus.

Example: In India, there is a proliferation of pilgrims visiting sacred natural sites within tiger reserves resulting in increased impacts on biodiversity. Ashoka Trust for Research in Ecology and the Environment and Alliance of Religions and Conservation developed the first model in India that assesses the impacts of religious tourism in tiger reserves, and broadens the contemporary model of top-down management by state authorities by engaging multiple stakeholders in their management and governance (Elkin et al., 2019). In Ranthambore and Kalakad Mundanthurai tiger reserves this has yielded encouraging results such as the reconciliation among park managers, religious authorities and civil society groups as well as facilitating interventions where responsibility is shared. These interventions, including awareness campaigns which highlight how conservation goals and religious beliefs are intimately aligned, have led to observed shifts in visitors' attitudes and behaviours (see Case study 5.3 in Part V and CSVPA, 2018d).



In India, in the Ranthambore and Kalakad Mundanthurai tiger reserves new conservation collaborations lead to tangible results such as organised cleanups of the waste from pilgrims along the pilgrimage route throughout the reserves. © Chantal Elkin

3.2 Prioritise reconciliation and methods for conflict resolution that include the diverse views, philosophies, values and cultural perspectives of all stakeholders, including vulnerable groups.

Example: Applying Arts-Based Methods for Transformative Engagement – through using a toolbox that builds on the Theory U – helps facilitate deeper reflection on priority issues (see Pearson et al., 2018). The toolbox provides the example of rethinking possibilities for the mining village Treherbert in Wales, United Kingdom. It asks how a new future in partnership with communities and with nature can be created. The participants then carry out an exercise for each of the four stages of the Theory U: convene, observe, reflect and act. In order to help participants reflect on current conflicts, they are invited to project themselves one hundred years in the future. They are asked to imagine that Treherbert Valley is a vibrant and thriving place for both humans and non-humans. They then write fragments of a story or a poem from the perspective of their character, thanking our generation for contributing to their well-being in future generations.

3.3 Work together with cultural practitioners to find viable and meaningful alternatives for those (cultural) practices that have perceived negative implications for the environment.

Example: The Bakonjo people who live in the foothills of the Rwenzori Mountains of Uganda and the Democratic People of Congo have a difficult relationship with chimpanzees. The forests that cover the slopes of the mountains support a significant part of the population of the endangered eastern subspecies of chimpanzee, Pan troglodytes schweinfurthii. However, when farming reached the edge of the Rwenzori National Park, chimps were persecuted to protect crops and their numbers declined. In addition, some people purposefully hunted chimpanzees for their bones, which were used by traditional healers to treat broken bones. One of the clans of the Bakonjo, the Bathangyi, see chimpanzees as their family and therefore treat them with respect and care. They practice forbearance when their fields are raided and gently encourage chimpanzees to spare their crops. Fauna & Flora International worked with Bathangyi elders and park officials to help the Bathangyi spread their message of respect and care to the rest of the Bakonjo, explaining that people of all clans should respect and help look after their wider family.

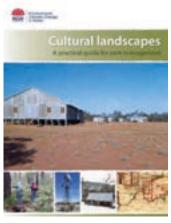


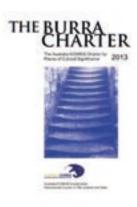
Hikers admiring the majestic lanscape of the Bernese Oberland, above Grindelwald, Swiss Alps. © Edwin Bernbaum

Guidelines 4 Assessment of values and significance of nature in protected and conserved areas

Sound governance and management of protected and conserved areas should incorporate their cultural and spiritual significance. Therefore, it is necessary to carry out an assessment of the cultural and spiritual values of those areas as well as an inventory of the attributes or features that convey these values. This information should assist in the selection of appropriate indicators for how to preserve and maintain those values. It will also help create a comprehensive image of the current status and the trends signifying changes of cultural and spiritual significance of nature that will inform holistic and integrated approaches in governance and management of protected and conserved areas.

The IUCN Green list of Protected and Conserved Areas Standard (IUCN WCPA, 2017) incorporates a section on the monitoring of cultural and spiritual values (see IUCN WCPA, 2017, p.10, criterion 2.1). However, it does not provide further guidance on how cultural values are to be identified or inventories created, except that it recommends that "measurement systems and thresholds should be developed in collaboration with the people and communities who hold the cultural value" (IUCN WCPA, 2017, p. 43).





Two important publications that offer ways of assessing the cultural and spiritual significance of nature. Left: Brown, 2010; Right Australia-ICCOMOS, 2013

Several methods for the assessment and inventory of cultural and spiritual significance of nature exist (Box 5). Some focus on processes in cultural heritage protection such as the Australia ICOMOS (2013) The Burra Charter which offer a stepwise approach for assessment and documentation of cultural heritage related places and values. Others, like Ramsar's Rapid Cultural Inventories for Wetlands focus on the full spectrum of cultural values in wetland ecosystems (Ramsar, 2016). Taking a landscape approach, Brown (2010) presents a practical guide for park management focusing on cultural landscapes which includes guidance on gathering cultural heritage information, identifying places, landscapes and values and for mapping cultural heritage. Regionally, tools may also be available; see for example, Sipiriano (2012) who presents the simpler tools and techniques of mapping cultural resources, including documenting, archiving and interpreting cultural data with a focus on intangible cultural heritage in the Pacific island States.

4.1 Ensure collaborative and participatory processes in the assessment and inventory of the key attributes and cultural and spiritual values of protected and conserved areas, ensuring the principles of Free, Prior and Informed Consent (see Glossary) are applied.

Example: The Uch Enmek Indigenous Nature Park in the Altai Republic lies within the Russian Federation and has been established by local populations in order to protect the natural and cultural integrity of the Park (SNSIa, 2018). The management plan builds on a body of documentation of the cultural and spiritual significance of sacred places as well places of myth and history that are sung in local epics. Using GIS, photography, film and written documentation these places are being recorded by park staff together with anthropologists and archaeologists and university students who work together with local shamans, healers, folk artists and other local people. Apart from a documentation centre, several innovative products which help communicate these cultural and spiritual values to the public have been produced such as a living landscape map (Dobson & Mamyev, 2010).



Daniel Mamyev, director of the Uch Enmek Indigenous Nature Park in the Russian Altai, collaborates with anthropologists and students on recording the cultural significance of nature. © Robert Wild

4.2 Draw on stakeholder information, archival records and field surveys to document the attributes and cultural values of local practices, processes and knowledge.

Example: The National Natural Park Hutsul, Ukraine, has documented in detail the rich traditional values, practices and knowledge of the Hutsul people – an ethnic group living in the mountains of Western Ukraine. One of the goals of the Park is the protection of the ethnic and cultural environment and the cultural and historical heritage of the local population. Visitor centres, local, national and international Hutsul festivals, performances, seasonal craft exhibits, publications, etc. allow a continuous re-creation of this living heritage and offer appealing learning tools to the visitors (Gardashuk, 2012).

4.3 Recognise, secure and regulate access to culturally sensitive information (including secret and sacred knowledge) throughout assessment processes and in the official information systems.

Example: In the Central Desert region of Australia, including Uluru-Kata Tjuta National Park and Indigenous Protected Areas, a digital archive has been created that allows for the partitioning of information, specifically to restrict public and community access to some knowledges on the basis of seniority and gender (Director of National Parks, 2010). This allows indigenous people to manage, restrict and promote how history and culture is presented and with full consent conditions from the communities involved.

Guidelines 5 Governance of protected and conserved areas

Many definitions for governance exist. The IUCN Best Practice Guidelines on Protected Area Governance propose a general definition of governance which is general enough to be deployed to protected and conserved areas:

The interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken and how citizens or other stakeholders have their say (Borini-Feyerabend et al. 2013, based on Graham et al., 2003, p. ii).

These IUCN Best Practice Guidelines further propose that the process of governance should be concerned with: a) who decides what the objectives are, what to do to pursue them, and with what means; b) how those decisions are taken; and c) who holds power, authority and responsibility – who is (or should be) held accountable (Borrini-Feyerabend et al., 2013, p. 11). IUCN's guidance for establishing good, equitable and fair governance refers to the IUCN matrix of protected area management categories and governance types.



Governance meeting of officials and locals who discus the inclusion of cultural significance in the Ysyk-Köl Biosphere Reserve Kyrgyzstan. @ Aibek Samakov

While the IUCN matrix includes a governance type addressing governance by indigenous peoples and local communities, it is not always understood that governance by indigenous peoples and local communities is underpinned by family, territory, spirituality and kinship structures rather than necessarily collectives of stakeholder interests (tebrakunna country et al., 2016). For example, the concept of spiritual governance relates to animist cultures for whom spirits are known to reside in natural features, landscapes and waterscapes. These spirits are traditionally and culturally considered key actors in governance arrangements, and this cultural phenomenon is an example of 'spiritual governance' and remains structurally unrecognised by the IUCN Guidelines (Verschuuren, 2016; Studley & Horsley, 2019; Studley, 2019). Practically speaking, this would mean including the agency of spirits, their representatives as well as giving recognition to their legal standing, as explained in Box 5.

A common issue is that protected area governance bodies do not represent all stakeholders and right-holders, such as the appropriate indigenous, cultural and religious groups that have rights and responsibilities relating to the cultural and spiritual significance of nature. For example, instances exist where spiritual and religious leaders (who represent larger groups) have not always been involved in protected area governance (see Case Study 5.3). In governance arrangements, there may also exist specific difficulties with the recognition of legitimacy of marginalised groups, such as indigenous people or long-term settlers, amidst the prevalence of mainstream religious groups.

5.1 Recognise diverse governance systems as an integral part of safeguarding the attributes and values of protected and conserved areas.

Example: World Heritage Site Cultural Landscape Ouadi Qashida (Holy Valley), Lebanon. Lebanon is one of the countries with the highest religious and cultural diversity in the world. The Holy Valley is considered the cradle of the local Christian Maronite Church, and has preserved significant remnants of the iconic cedar forests, the Cedars of God (Higgins-Zogib, 2005). Management of the Holy Valley is under the responsibility of three monasteries attached to the Maronite Church, which has always been tolerant of other religious groups. Lebanese society holds that the diversity of religions and beliefs deserves to be cherished, defended and further developed. The Holy Valley also includes several historic troglodytic hermitages, which are commonly used for solitary, silent retreats for Christians and Muslims belonging to different denominations.

5.2 Build professional capacity of governance bodies and protected areas staff to practice good governance in ways that incorporate respect for the spiritual and cultural significance of nature.

Example: The governance and management of the Agusan Marsh Ramsar Site in the Philippines is regulated by Protected Area Management Board policies – but most importantly, by the beliefs of the indigenous Manobo people. Indigenous knowledge systems and practices provide tools for the management and protection of Ancestral Domains (traditional lands) under the Philippines National Integrated Protected Areas System Act 1992.

Today, the communities in the Agusan Marsh are actively involved in using their traditional knowledge and methods to build capacity in site management and governance. In doing so, they are represented on the Committee of Indigenous People, established under the Protected Area Management Board (the policy-making body of the wildlife management area), and their customary laws and conflict resolution systems have been integrated into the Board's Manual of Operation and Communication Plan. This not only strengthens the professional capacity of the governance body itself but also provides a built-in mechanism to ensure that any capacity building efforts will be developed with indigenous knowledge systems and beliefs in mind (Denyer et al., 2018).

5.3 Incorporate cultural and spiritual forms of governance for protected and conserved areas.

Example: Canadian research has demonstrated that indigenous people subjected to alien governance systems have been forced to *prove* a capacity to self-govern – in other words, forced to ask for a restoration of governance rights – but only those that conform with non-indigenous standards. However, the Tla-o-qui-aht peoples developed the concept of Tribal Parks, which base governance and management on indigenous culture. Subsequently, Tribal Parks were gazetted by indigenous people and lands in various places (Murray & Burrows, 2017). In 2017, the Tla-o-qui-aht peoples led the establishment of an Indigenous Circle of Experts to re-introduce traditional governance rights and practices over protected areas and produced documents now accepted by Parks Canada (The Indigenous Circle of Experts, 2018).



Indigenous Elder Joe Martin explaining how their totemic animals provide teachings that are applied as laws and governance principles in the Tla-o-qui-aht Tribal Park in Canada. © Bas Verschuuren

Guidelines 6 Establishment of new protected and conserved areas

During the process of establishing and gazetting a new protected area, the cultural and spiritual meanings and values of nature or landscape are often only considered, if at all, as background information, but not further considered when it comes to involving the key rights-holders and stakeholders in the governance process and activities such as defining boundaries, establishing the legal category, choosing the name, image, and other important aspects. Appropriate representation can be secured in many ways, for example through representation in the governance bodies and structures for the proposed areas, as well as boards, advisory committees and management teams.

Especially in cases where there are custodians of places considered culturally or spiritually significant, the Principle of Free, Prior and Informed Consent (FPIC) will need to be applied for information sharing and participatory processes established. Specific guidance on dealing with sacred natural sites is available from the Secretariat of the Convention on Biological Diversity (SCBD, 2004) and from IUCN & UNESCO (Wild & McLeod, 2008).

Not all national protected areas agencies may have staff trained in participatory processes and methods, or with a background in sacred and cultural landscapes and waterscapes, or be familiar with multi-stakeholder governance and designing forums. IUCN's Global Protected Areas Programme, regional IUCN offices and the World Commission on Protected Areas may be able to offer support, materials and guidance.

6.1 Ensure that rights-holders and stakeholders related to the cultural and spiritual significance of the protected and conserved area are included and involved in the various stages of the establishment and declaration of new protected areas.

Example: Since the 1990s, Australian governance and policy frameworks have been developed and refined to recognise protected areas as part of indigenous land and sea country, and to enable indigenous people to participate in conservation planning and country management. The Australia Indigenous Protected Area programme, established in 1997, provided a framework for indigenous communities to voluntarily manage their land as part of the National Reserve System. Managed for conservation by indigenous organisations on behalf of their traditional owners, Indigenous Protected Areas are usually IUCN protected areas categories V or VI (IPAS, 2019). The programme has been a success story. By 2017, 75 Indigenous Protected Areas had been established, including over 67 million hectares, equivalent to 44% of Australia's National Reserve System. Over 60% of Indigenous Protected Areas are managed by Australian Government-funded indigenous ranger groups.



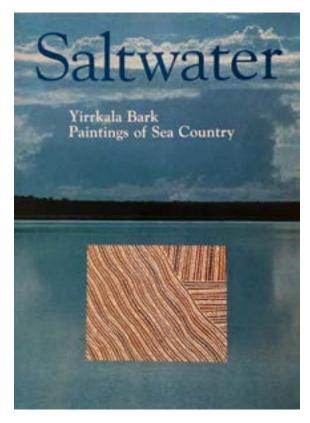
The community conserved area of Tsum Valley in Nepal is governed based on religious principles that have been established by Guru Serap Dorje Drukpa Rinpoche in 1921. They have been endorsed by the local people and recognised by the Prime Minister Dr Baburam Bhattarai in 2012. © Jailab Kumar Rai

6.2 Define the purpose, objectives, standards, boundaries, zoning and regulations of each new protected area, with particular attention to the cultural and spiritual significance of nature, and ensure that the principles of Free, Prior and Informed Consent are applied in relation to agreements with indigenous people and local and religious communities.

Example: The Natural Park of the Monastery of Rila, Bulgaria. With an area of approximately 25,000 ha, this park is one of the largest and more significant European protected areas initiated by a Christian Church, namely the Bulgarian Orthodox Church (see Case study 5.7 in Part 5). It is also a good example of effective integration of spiritual, cultural and natural values for conservation. The Park was established by a decree of the Ministry of the Environment and Water Resources in 2000. Approximately 19,000 ha of the park belong to the Church, and the remaining to the State. State property is Nature Preserve (IUCN Category III), and Church property is a Natural Park (IUCN Category IV-V), and it is surrounded by a National Park (IUCN Category II) (Mallarach & Cataniou, 2010).

6.3 Recognise culturally and spiritually significant places, and their linkages with the wider land and waterscape in the official declaration of each new/ proposed protected area.

Example: The Poblet Valley Protected Area was created in 1984 by the Government of Catalonia, Spain, to protect the landscape around the large medieval fortified Abbey of Santa Maria de Poblet, which was included in the UNESCO World Heritage List in 1991. The protected area also includes part of the agricultural lands and forests



Traditional knowledge about the creation of sea country has resulted in one of the world's longest continued art traditions. Paintings of sea country have not only been instrumental in winning legal rights to the sea and marine resources, they also form an integral part of informing the designation and management of Indigenous Protected Areas in Northern Australia. The Yirrkla Bark Paintings of Sea Country have also proved key evidence in the courts in support of Indigenous peoples' claims to ownership of the sea.

which had been carefully managed by the Cistertian monks for over seven centuries. Five years later, the Poblet Valley protected area was integrated into the Nature 2000 European Network and became part of a larger natural area of approximately 30,000 ha. This protection has helped to maintain the binding relation between its natural, cultural and religious values and to preserve the spirit of this outstanding place.

6.4 When a protected area or site within it is given a name and/or identity, implement participatory processes to select an appropriate name in a local language that represents and is respectful of its natural, cultural and spiritual values.

Example: The Green Heart of Holland is a widely recognised and understood as a valuable landscape requiring constant protection. The name originated in the 1940s. In 1994 the ecological artists Helen Mayer Harrison and Newton Harrison were invited by the Cultural Council of the province of South Holland to envisage alternatives to the proposed urban development which would have destroyed the integrity of the landscape. They focused on the icon of the *heart* which was developed visually, on maps and in poetry, and developed the metaphor connecting the core Green Heart area with biodiversity corridors or *arteries* separating the cities of the Randstad (Harrison & Harrison, 1995). The icon continues to be part of the strategic landscape master-planning in The Netherlands used by planners and policymakers.

Guidelines 7 Planning for protected and conserved areas

Taking into consideration the cultural and spiritual significance of nature in management planning offers opportunities for the integration and holistic management of multiple attributes and values of a landscape. This includes interdisciplinary cooperation and interpretation or public education and outreach in local languages which can also support a localised sense of belonging, place and ownership.

In protected area management plans, there is typically a focus on categories of values usually associated with nature conservation (i.e. biodiversity and geodiversity) and consequently the cultural and spiritual significance of nature is downplayed or inadequately included. In some plans for protected areas, the cultural and spiritual significance of nature is used as background information, without real implications for the planning process-related to zoning or regulations, for example. This absence often creates problems or conflicts for and with the peoples or groups that have cultural and/or spiritual relationships with the area, whether locally resident or not.

7.1 Develop locally appropriate approaches to assessing and integrating the cultural and spiritual significance of nature into planning, regulation, zoning and design, not only at the level of each protected area, but also at the systems level.

Example: Lake District National Park, designated in 1951, is the largest protected area in England, covering 2,292 km². This rugged region of mountain scenery was central to the development of the Romantic Movement in Britain, as well as to the modern conservation movement at the beginning of the 19th century. Through the literary works of Wordsworth, Ruskin and other significant poets and landscape painters, the values associated with Lake District had a wider influence first in Britain, through the system of national parks. Their global influence hinged on their pioneering efforts in creating protected but lived-in and working landscapes (Hourahane et al., 2008). In Europe, the largest proportion of protected areas is Protected Landscapes – Category V Protected Areas, no matter what designation they may have.

7.2 Adopt planning tools and policies that recognise the diversity of coexisting natural and cultural values, thus ensuring the adequate representation of the cultural and spiritual significance of nature in the management planning processes for protected and conserved areas.

Example: The four indigenous tribes sharing the Sierra de Santa Marta National Natural Park and Biosphere Reserve in Colombia (ik, kogi, wiwa, kankuama) have developed several planning strategies and tools including guidelines and documentaries to explain their own world view to outsiders. These tools show the metaphysical and cosmological principles they share, as well as the main ethical and moral applications of custodianship, including the ritual practices and duties to maintaining harmony at the 'Heart of the World'. Traditional and local rules accord with ecological principles (Mayr et al., 1997).

7.3 Deploy appropriate processes and methodologies in planning to identify and maintain relationships with stakeholders related to the cultural and spiritual significance of nature.

Example: Chuwanimajuyu, San Pedro La Laguna Municipal Park, at Lake Atitlan, Guatemala. To help preserve Atitlan's natural resources, in 2001 municipal nature reserves were created to preserve cultural heritage and biodiversity by local authorities and the government with the help of USAID and The Nature Conservancy. They used an established conservation planning methodology (Conservation Action Planning or CAP, Groves & Game, 2016) to set priorities, develop strategies, and measure success. At the whole planning level/process, the biodiversity and the existence of sacred sites and the cultural and spiritual values associated with those natural and cultural resources were considered and had the outcome of avoiding conflicts between user groups.



Montsant Natural Park, the first protected area of Spain to adopt a strategy for integrating cultural and spiritual values in planning, management and public use. © Rafael López-Monné

7.4 When the existing planning does not take into consideration the cultural and spiritual significance of nature, and the next plan will not be completed in the near future, develop a strategy to include them as much as possible.

Montsant, meaning Holy mountain in Catalan, is located south of Barcelona. It has been considered a sacred mountain since ancient times, hosting numerous hermits from the 8th century to the present. Montsant has been managed by Christian monastic communities for centuries until the 19th century. Considering the rich cultural and natural heritage, the area was declared a Natural Park in 2002. Anticipating the difficulties to adopt a formal plan (which has not been adopted yet in 2020) the Park Board requested to Silene Association to prepare a strategy to fully integrate the cultural and spiritual dimensions in the Park management and planning. In 2008, a strategy was adopted by the Park Board and has been implemented since then. The strategy includes recommendations to improve public use, education and interpretation, and to preserve and enhance an array of intangible heritage values, such as silence and tranquillity (see Mallarach et al., 2012, p. 120-123).

Guidelines 8 Management implementation in protected and conserved areas

The aim of the guidelines in this section is to contribute to making the management of protected and conserved areas more effective, such as "the extent to which management protects values and achieves goals and objectives" (Hockings et al., 2006, p. vii). Recognising, understanding and respecting diverse perspectives on the cultural and spiritual significance of nature can make significant contributions to the effective and sustainable management of protected areas. Doing so would be logical as the cultural and spiritual significance of nature quite often also motivates people to contribute to the conservation of the area and in fact can be a primary driver for people to protect and conserve nature.

8.1 Ensure that management reduces threats and impacts to nature while revitalising the cultural and spiritual significance of nature.

Example: Management plans and interpretation materials of several National Parks, such as Gran Sasso and Monti della Laga, Majella, and Monti Aurunci in Italy, underscore the importance of non-material values of traditional



Monastery Sretenje at the Ovcar-Kablar Gorge in south-eastern Serbia is dedicated to the visitation of the Virgin and an important place of pilgrimage. © Vladimir Mijailovic, used under Creative Commons Attribution-Share Alike 3.0 Unported

economic activities, especially related to food. This acknowledgement, however, rests uniquely on biological considerations (e.g. contribution to conserving habitat types and genetic resources) and the appeal that these activities may have as consumer products. Little emphasis is placed on their significance to local people as traditional cultural practices and knowledge related to agro- and pastoral activities of production (see Case study 5.5 and CSVPA, 2018f). There is a need for their integration in the formulation of operational objectives, decision making, conflict resolution and management guidelines for public use while ensuring the participation of the key stake and rights-holders (Frascaroli & Fjelsted, 2019).

8.2 Ensure that each protected area management team understands the cultural and spiritual significance of nature and includes or collaborates with people who have in depth knowledge and understanding of this significance.

Example: Since its designation as a protected area in 2000, Ovcar-Kablar Gorge in south-eastern Serbia has integrated natural, cultural-historical and spiritual components in its management strategies. Besides being a place of pilgrimage where religious life and festivities unfold, natural and cultural values in the area are also promoted through activities organised in collaboration with cultural, scientific and non-profit organisations. In some villages and the Ovcar Spa, rapid population decline is addressed through economic development projects. These projects often

clash with locally held immaterial values and traditions and a more active role of local stakeholders in governance and decision-making processes could help overcome this (see SNSI, 2018b).

8.3 Integrate and promote different knowledge, beliefs and expertise concerning the cultural and spiritual significance of nature into management policies, knowledge systems and programmes.

Example: Cybertracker is a hand held geolocation and data collection application used by indigenous trackers to gather data on species, migration, disease, population density, etc. Cybertracker technology bridges between traditional knowledge competences and training with new technologies and data management. The Khwe San people in Bwabwata National Park in Namibia use cybertracker to monitor species biodiversity, density and trends. Cybertracker also includes a competence assessment that ranks trackers and rates the quality of their work, including work on cultural places. The North Australian Alliance of Indigenous Land Managers uses I-tracker (based on cybertracker) for species as well as cultural sites and natural features of spiritual significance.

At Dhimurru Indigenous Protected Area, Indigenous Rangers have collected a broad data set including videos, stories and point data on sites and observations. This data is stored in a data management system which allows setting permissions based on cultural sensitivity and sourced for planning cultural heritage related work (Dhimurru, 2015).

8.4 Promote citizen participation and volunteering in the protection, conservation and safeguarding of cultural and spiritual values of nature as an integral part of management implementation.

Example: The Green Growth and Pilgrimage Project, which began in 2017, aims to bring together partners from five countries (United Kingdom, Italy, Romania, Sweden and Norway). Partners exchange best practice on how pilgrimage can help conserve and enhance natural and cultural heritage across protected areas, whilst developing jobs and growth along pilgrimage routes. Most pilgrimage routes in Europe connect protected areas and conserved areas (Interreg Europe, 2019).

Guidelines 9 Interpretation in protected and conserved areas

Interpretation is an important component of management and can extend beyond the borders of protected and conserved areas. Interpretive and educational materials can play key roles in furthering wider management goals and objectives through involving secular members of the general public as well as other stakeholder groups and support the establishment and maintenance of protected areas (Bernbaum, 2019). These programmes can explain the values that protected or conserved areas have for indigenous traditions, local communities, and/ or mainstream religions, depending on the particular area; and relate these values to those held by visitors so that they can more easily understand, appreciate, and support

environmental and cultural conservation of protected areas. The emphasis should be on developing mutual respect and inclusiveness so that all parties will feel motivated to work together for the common good of the areas and the people for whom they are important.

Interpretation, for example, can showcase the cultural and spiritual significance of nature in culturally appropriate and attractive ways that engage visitors to protected areas to feel a deeper and more emotional connection to natural places. With guidance and knowledge, people are encouraged to read and add human interpretations into the landscape – and this offers a powerful and meaningful experience on many levels.

9.1 Use interpretation of the cultural and spiritual significance of nature to inspire and enrich visitor experience by engaging people as active participants.

Example: At Great Smoky Mountains National Park, a series of wayside exhibits links Cherokee traditions and stories to features of the natural landscape. The exhibits have been developed in native language as well as in English and feature culturally appropriate images that convey the stories related to the landscape. The waysides also enabled the Cherokee to reach the wider public with the messages they wished to disseminate about their sacred sites and practices. In addition, the positive aspects of the Cherokee and the parks staff working together on a project of mutual interest helped park management and the Cherokee to deal with a dispute over a controversial land swap (see Case study 5.4 and Bernbaum, 2017).



At Great Smoky Mountains National Park, a series of wayside exhibits links Cherokee traditions and stories to features of the natural landscape. © Edwin Bernbaum

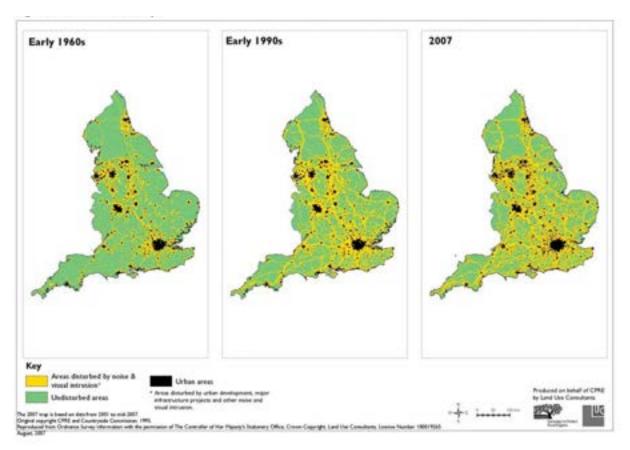


Figure 2. Intrusion mapping is an important tool for the planning or national tranquillity areas (Land Use Consultants, 2007).

9.2 Develop interpretation of the cultural and spiritual significance of nature based on respect for different kinds of knowledge, values and visions for the place, encourage diverse types of expression such as art, stories, songs, music, games and dance.

Example: A collaboration among Great Smoky Mountains (Shagonage) National Park, the Eastern Band of the Cherokee, the Museum of the Cherokee Indian, and The Mountain Institute developed a series of wayside exhibits linking Cherokee traditions and stories to features of the natural landscape (Bernbaum, 2007). These include buzzards, trees, a mountain, and the river itself and are placed along the 2-kilometer Oconaluftee River Trail. The waysides are in English and Cherokee and are illustrated with contemporary artwork by local Cherokee artists selected by the Museum of the Cherokee Indian. As much as possible, the stories related on the signs are in the voices of living Cherokee elders and storytellers in English and in Cherokee in order to ensure authenticity and immediacy, as well as promote Cherokee language and culture (see CSVPA Case study, 2018c).

9.3 Establish meaningful cultural connections with nature through interpretation that enhances experiences of solitude, quietness, silence.

Example: The Campaign to Protect Rural England (CPRE) is built on the idea of valuing undisturbed countryside as a resource in itself and emerged in the early 1990s

(CPRE, 2018). The campaign produced the first ground-breaking tranquil areas maps of England in 1995 with the Countryside Commission. Concern showed a growing loss of tranquil areas: down from 75% in 1960 to only 50% in 2007. New detailed tranquillity maps published in 2006 demonstrated areas valuable for lack of disturbance and for the presence of natural features that foster feelings of tranquillity. The maps launched a three-year campaign to press Government to recognise and protect tranquillity at all levels of public policy. In 2012 the Government put in place a national planning policy to protect tranquillity.

Guidelines 10 Public use, visitation and engagement in protected and conserved areas

This section on public use is important since protected and conserved areas the world over receive hundreds of millions of visitors a year, and this visitation requires management and offers opportunities for involving the general public, in management and motivating support for conservation (Yu-Fai et al., 2018). The public includes people with religious backgrounds, indigenous people as well as secular people.



Pilgrims and tourists at the Okunuin cemetery on Mount Koya in Japan. Mount Koya is the center of Shingon Buddhism, introduced to Japan in 805 by Kobo Daishi, one of Japan's most significant religious figures. It is the site of Kobo Daishi's mausoleum and the start and end point of the Shikoku 88 Temple Pilgrimage.

© Edwin Bernbaum

It's important to focus on the public since it also includes many secular people, especially in societies where non-traditional, non-religious relationships to nature need to be taken into consideration in the management and governance of protected and conserved areas. IUCN's Nature for All programme takes up that role and engages the general public in nature conservation activities (see http://natureforall.global). Many secular protected area managers would identify themselves as members of the public, rather than with mainstream faiths or indigenous people, they are therefore also qualified to speak for this stakeholder group.

10.1 Cultivate the cultural and spiritual connections of local and non-local – including secular –stakeholders with nature to ensure their participation in the safeguarding of protected and conserved areas.

Example: Artists, professional and non-professional, across all artforms (visual artists and designers, performing artists, writers, craftspeople) are increasingly engaged with ecological issues including climate change, biodiversity loss, sea-level rise, and adaptation. Cultural and spiritual values are central to their work and many take cues from indigenous peoples' ways of knowing and living. The material impact of their work is also becoming more important. Artists both represent and create environments – they work



The painting "Kreidefelsen auf Rügen" by landscape painter Caspar David Friedrich (1818) near where he painted it in today's UNESCO World Heritage Ancient and Primeval Beech Forests, Island of Rügen, Germany. This particular work of Friedrich is not only said to have significantly contributed to an ever increasing influx of tourists visiting the region for its unique nature and landscapes but also to the region's cultural and art history. © Edwin Bernbaum

collaboratively on restoration, remediation and activism (TAD, 2019). Their work appears in cultural institutions but also increasingly on site in the landscape, for example the work of Andy Goldsworthy appears in several protected areas across Europe. Whilst public art is regarded as an urban phenomenon, many artists are also interested in working in other non-urban contexts including Protected Areas. Across all art forms artists' key contribution is to enable people to see the world differently. That can be from another human or non-human perspective, on a different timescale or physical scale, or a different way of living or thinking.

10.2 Draw on knowledge and experiences of the cultural and spiritual significance of nature to motivate members of the public to contribute to organisations that support protected and conserved areas and promote conservation generally.

Example: Drawing on the deep cultural and spiritual significance that the iconic natural features of Yosemite National Park have for the general public – citizens of San Francisco in particular – the Yosemite Conservancy has been able to raise millions of dollars for projects of interest to park management, including preserving a grove of giant sequoias and improving access to Yosemite Falls. For example, in 2011 the Conservancy announced completion of the Campaign for Yosemite Trails, a \$13.5 million effort to restore popular hiking trails that many people use to visit iconic sites such as Half Dome for inspiration and renewal. Without this kind of cultural and spiritual significance of nature to inspire and galvanise the public, the Conservancy would have had difficulty raising the funds it has and recruiting large numbers of volunteers to work on projects such as trail maintenance and clean up (Bernbaum, 2018; Yosemite Conservancy, 2011).

10.3 Engage support for conservation through public interest in historical and contemporary figures who have promoted and contributed to the enhancement of the cultural and spiritual experience of nature.

Example: At the visitor centre of the Renkumse Poort in the Netherlands, a state forestry managed ecological corridor connecting the Veluwe National Park and the river Rhine, visitors can take a seat in the armchair of the last farmer of the area and listen to his stories about the old days (Renkumsbeekdal, 2018). The stories talk about the role of nobility and the cultural practices of farmers and those operating the paper mills on the streams in the park. Children follow their own fantasy figures as they walk a leprechaun trail wearing a leprechaun hat. The trail is marked by poles in the shape of leprechauns, originally based on the images of a famous Dutch artist. The trail allows them to playfully engage in learning about nature (SBB, 2018).

Guidelines 11 Monitoring and evaluation in protected and conserved area management

The IUCN Green List (IUCN WCPA 2017, p. 24, par. 4.3.1) includes a provision for the maintenance and enhancement of identified cultural values to be part of the site's monitoring plan. For each of the major site values identified under Criterion 2.1 (identify and understand major site values), a monitoring system should be in place and a set of performance measures must be defined and documented, which provides an objective basis for determining whether the associated cultural value is being successfully conserved. This objective is consequently complemented by the recommendation that: "Assessing against thresholds for cultural values should be done in conjunction with those people and communities holding the cultural values" (IUCN WCPA, 2017, p. 43). Integrating information on cultural and spiritual significance of nature in governance and management involve the key stakeholders and ensure their opinion on the choice of indicators and monitoring and evaluation methods. This section contains guidance that will assist with this task.

11.1 Ensure that monitoring and evaluation mechanisms encompass the key attributes, values and qualities in relation to the cultural and spiritual significance of nature in protected and conserved areas.

Example: The Inventory of mazar, kasiettuujer and yiykjer (sacred natural sites) of Kyrgyzstan. Most Kyrgyz spiritual practitioners believe that primordial sacredness resides in the Kyrgyz land independent from humans. Since 2005, Aigine Cultural Research Centre, with the guidance of local custodians, studied and documented 1,200 sacred sites and related cultural and spiritual practices (Aitpaeva, 2013). Investigation revealed a network of sacred sites which provided a better understanding of the magnitude of traditional beliefs and practices and their role in governance and management of the sacred landscape. Traditional beliefs combine Islam and kyrgyzchylyk, the complex of traditional knowledge and ways of knowing of the Kyrgyz people. Kyrgyzchylyk includes pilgrimage, healing, spiritual mentorship, teaching, and epic recitation practices related to sacred places (see SNSI, 2018c; 2018d).

11.2 Ensure collaborative, participatory methods for implementing and improving the inventory and monitoring of the cultural and spiritual significance of nature.

Example: Inventory and report on the state of sacred natural sites and sanctuaries of two indigenous people in Arctic Russia, the Yamal-nenets and Koryak, were carried out in close collaboration with the people themselves (Conservation of Arctic Flora and Fauna, 2004). The report describes the state of sacred sites, their importance to natural and cultural heritage, evaluates threats, and makes recommendations for their conservation. The intimate relationship between the sacred sites and traditional ways of life shows that the maintenance, monitoring and protection of these sacred sites depend on healthy lifestyles. Recommendations for their protection include a focus on the rights of indigenous people to establish their own protected areas in which they develop their own monitoring systems for natural and cultural heritage.

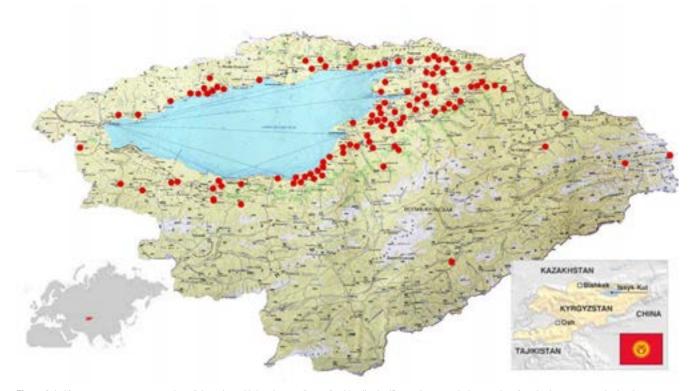


Figure 3. In Kyrgyzstan an assessment in collaboration with local custodians of spiritually significant sites revealed networks of such places across the landscape, intersecting with major protected areas such as Ysyk-Köl Biosphere Reserve. @ Aibek Samakov



A ritual cave with its guardian as seen from the top of Nyldy-Ata gorge, Kyrgyzstan. Over 150 guardians collaborate with Aigine Cultural Research Centre to assess culturally and spiritually significant places in the region around the gorge. This guardian is categorised as a Shai'yk. Shai'yks are people who look after a sacred site, guide pilgrims and lead the ritual performances. © Gulnara Aitpaeva/Aigine

11.3 Communicate and integrate decisions based on monitoring and evaluation of cultural and spiritual significance of nature into the planning and management cycle, reporting and periodic evaluations.

Example: A project developed by the NGO Tiniguena has brought to light women's knowledge of traditional management of shellfish resources in the Bijagós Archipelago, a World Heritage site, Biosphere Reserve, Ramsar Site, part of a large marine community conserved area in Guinea-Bissau. This project also sought to address the recent trend towards shellfish commercialisation by supporting community dialogue on amendments to traditional regulations that govern the exploitation of this valuable resource (Sanó, 2017). Environmental education brochures that included the results of monitoring and evaluation were developed for schools within the area and disseminated among the nearly 32,000 inhabitants of the marine area.

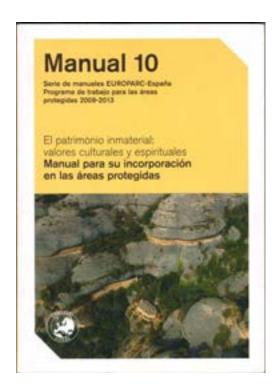
11.4 Evaluate the extent to which goals related to the cultural and spiritual significance of nature, have been achieved taking into consideration the relevant stakeholders and groups.

Example: The NGO EcoPeace Middle East has prepared the first Regional NGO Master Plan for the Sustainable Development of the Jordan Valley, putting scientifically sound and economically feasible policy recommendations behind their vision to restore the Jordan Valley (EcoPeace, 2015). This is a transboundary project covering portions of Jordan, Palestine and Israel which has the support of national governments and religious authorities, who are also involved in the monitoring of the progress of the project against their perception of the cultural and spiritual significance of nature. The project is supported by an array of carefully prepared and well-presented publications, some of them faith-based aiming at the Muslim, Christians and Jews populations and the representation of their religious and spiritual values in the watershed (see www.ecopeaceme.org). To enable the monitoring of progress against the project goals, EcoPeace maintains a common ground which respects all stakeholder perspectives and ensures sustainable use by all sides with a view to restoring the ecology of the river ecosystem.

Guidelines 12 Adaptation and scaling of protected and conserved areas

Spiritual and cultural sites, landscapes and waterscapes may be a single tree, a mountain chain or watershed, or vast tracts of territory, including subterranean aspects. Scaling or adapting these global guidelines to particular circumstances at local, national, regional and transnational scales provides an opportunity for both site management and an approach to systems of protected and conserved areas and the wider spiritual and cultural landscapes and waterscapes. Experiences of successful designation, management and governance of spiritual and cultural sites can provide a foundation for a national policy framework, sharing of good practices between protected and conserved areas and improving connectivity.

A considerable body of work has shown that most protected areas are not adequate in size to conserve the biodiversity within them, especially wide-ranging animals. The boundary of a protected area may not match the scale of the spiritual or cultural landscape either. IUCN and many other organisations, academics, and governments have been promoting greater attention to connectivity of landscapes and waterscapes for conservation purposes (Hilty et al., 2019; Worboys, 2011) and emphasise that successful connectivity conservation is anchored in the ability to understand and unite the diverse custodians, peoples, land owners and interested parties in developing a shared value base for common action. This includes the sacred and cultural characteristics of the landscape at different scales.



Front cover of Intangible Heritage: Cultural and Spiritual Values. A Manual for Incorporation in Protected Areas in Spain (Mallarach et al., 2012). The publication is Spain's response to IUCN recommendation V.13 on Cultural and Spiritual Values of Protected Areas issued at the 2003 World Park Congress

12.1 Promote the use and adaptation of these guidelines, at the system level of protected areas, when governments review their own guidelines about the establishment, planning and management of protected areas.

Example: The World Heritage Cultural Landscape of the Sacred sites and Pilgrimage Routes in the Kii Mountain Range was inscribed in the World Heritage List in 2004, recognising the Outstanding Universal Value of the cores of three of the most significant religions in Japan: Shintoism in Kumano-Sanzan, Shingon Buddhism in Koyasan and Shugendo in Yoshino and Omine, and the pilgrimage routes connecting them (ICOMOS, 2004). The management is in charge of a diversity of entities, including the Shinto shrines and Buddhist Temples which are managed by religious organisations and are in charge of their conservation. Layers of protection interrelate in the management of both cultural and natural heritage, illustrating a system-level conservation of nature and culture, based on coexisting spiritual values (see Case study 5.8).

12.2 Identify opportunities for improving the governance and management of the cultural and spiritual significance of nature through regular large landscape-scale reviews.

Example: Led by the Spanish section of Europarc Federation, a participatory process was undertaken in Spain from 2010–2012 to review the cultural and spiritual values of protected areas of the country. Over 40 experts from 12 regions were involved. The main outcome was the publication of a guidance manual to integrate these values in protected areas, including 45 recommendations with examples from Spain. The manual has been used since then in diverse training and educational modules at different levels, fostering a more inclusive attitude towards cultural and spiritual values and meanings in Spain (Mallarach, 2012; Mallarach et al., 2019).

12.3 Review and adapt the governance and management approaches of protected and conserved areas in the context of their wider landscapes and waterscapes based on knowledge of existing cultural and spiritual linkages.

Example: The Uganda Wildlife Authority (UWA) manages the Rwenzori National Park. UWA has full authority to manage the park but collaborates with the neighbouring communities made up of Baamba, Bakonzo, Batoro and Batwa ethnic groups. These are largely subsistence farming communities numbering in the region of 2 million people. The Park Community Institution facilitates communities to participate in park management through elected local government representatives. Multiple use agreements provide for regulated access to specific natural resources in specified zones. Since 2012, following agreement between UWA and the Rwenzori Kingdom, a cultural institution of the Bakonzo, access to some cultural sites within the park is allowed, and avenues for community leaders and cultural institutions to participate in park management have been opened (see Case study 5.1).



Case Studies



Daoist monks perform the dedication ceremony for the construction of China's first Daoist Ecological Temple and Environment Education Centre on the sacred mountain of Taibei as part of the nation-wide Daoist ecological program. © Alliance of Religions and Conservation, Caroline Stikker

These best practice case studies demonstrate how these guidelines can be implemented in protected areas worldwide. The case studies have been selected to represent an even spread of geographical regions, religions and spiritual traditions, management categories and governance types. All of the case studies found in these guidelines, plus many others, are presented online in extended versions at www.csvpa.org. Several case studies are described in depth in the complementary edited volume (Verschuuren & Brown, 2019).

Case Study 1 Integrating the spiritual values, sacred sites and cultural framework of the Bakonzo, the Mountain People, into the management of Rwenzori Mountains National Park, Uganda

Summary

The Rwenzori mountains range, Uganda, is a sacred landscape for the Bakonzo people, the meanings and uses of which originate with *Kithasamba*, the Creator, who inhabits the snowy peaks. The National Park, which includes African's fourth highest peak, permanent glaciers and montane forest supports 70 species of mammal, 217 species of birds and is exceptionally rich in endemics species. The park is bordered by the villages and fields of the Mountain People. The Uganda Wildlife Authority (UWA) is responsible for protecting the park and supervising community access to resources while cultural institutions help manage sites of historical and cultural significance (Infield, 2013).

Steps to integrate cultural values into park management were initiated in 2005 under a project implemented by UWA and Fauna & Flora International, a conservation NGO. Investigating cultural links between community, park and nature was the starting point. An informal inquiry provided a platform for a more formal analysis using focus group discussions, key informant interviews and nonobtrusive observation. The NGO brokered agreements for the park management plan to recognise Bakonzo values and include specific activities related to cultural values and helped negotiate a Memorandum of Understanding between the park and the Rwenzori Kingdom. The project raised awareness of cultural values and their relevance to park management, and of park values, including its role in conserving cultural values, amongst communities (see CSVPA, 2018e).

Governance

The Uganda Wildlife Authority manages the National Park. UWA has full authority to manage the park but collaborates with the neighbouring communities made up of Baamba, Bakonzo, Batoro and Batwa ethnic groups. These are largely subsistence farming communities numbering in



Traditional cultural leaders with a staff member of the Uganda Wildlife Authority (in a green uniform) during a consultative meeting. © Arthur Mugisha

the region of 2 million. The Park Community Institution facilitates communities to participate in park management through elected local government representatives. Multiple use agreements provide for regulated access to specific natural resources in specified zones. Since 2012, following agreement between UWA and the Rwenzori Kingdom, a cultural institution of the Bakonzo, access to some cultural sites within the park is allowed, and avenues for community leaders and cultural institutions to participate in park management have been opened.



One of the ridge leaders standing near Kaghoma, a sacred natural site (a tree on his left) that was abandoned when the park was created. © Arthur Mugisha

Management

The Senior Warden and a staff of wardens and rangers are responsible for protecting the park and its resources, supervising and monitoring community access, managing human wildlife conflict, and managing tourism. Community user groups play roles in the management of resource access. Cultural institutions including Ridge Leaders play roles in managing sites of historical or spiritual cultural significance, the wider spiritual significance of the mountains and access to resources. Park staff and Ridge Leaders wish to control access to the mountain but are concerned about different issues. Tourism revenues are important to both but access to the peaks, prohibited under Bakonzo beliefs, is contested.

Lessons learned/best practices

- Trust had to be built before communities would share information about the sacred landscape and specific sites or engage with the idea of managing them in partnership with park management.
- Integrating cultural values into the park made it more meaningful and relevant to the community, while formalising access to sacred sites improved support for the park.
- Rituals and practices carried out at sacred sites helped overcome conflicts between community and park, and were an entry point for community engagement in park management.
- Cultural institutions were closely linked to the management of the sacred landscape. Communities were called on by the Rwenzori Kingdom to extinguish a fire that threatened the moorland zone.
- Integrating cultural values reduced conflict, increased collaboration and participation and engaged the support of Ridge Leaders in regulating access to park resources in locations rangers rarely reached.
- Giving attention to cultural values in the park planning process was important for both the community and park officials, stimulating positive engagement with the process.
- Understanding how culture related to conservation required a painstaking process, patience and understanding. It could not be rushed, and was built on trust and mutual appreciation. It is neither an easy option nor a silver bullet for problems.

Quotes

"You people have been coming to talk to us about the park for years. But now you are talking about our culture, you are finally talking about something that is important to us."

Member of the Bakonzo ethnic group living on the mountain

"We have learned that people's attitudes to conservation are because of the cultural beliefs about the mountain." Rwenzori Mountains National Park Ranger

Contributors

- Mark Infield, Ministry of Water and Environment, Uganda.
- Arthur Mugisha, AIMM Green, Uganda.
- Moses Muhumuza, Mountains of the Moon University, Uganda.

Case Study 2 Tibetan spiritscapes and spiritual governance in Southwest China

Summary

In Tibetan lay society, spiritscapes or enspirited sacred natural sites are inhabited by resident or guardian spirits known in Tibetan as gzhi bdag. These forested habitats are typically located on the middle slopes of most mountains and have been nurtured as a result of ritual behaviour for millennia. The animistic beliefs that support Tibetan spiritscapes almost became extinct during the Cultural Revolution (Rowcroft et al., 2006). However, since China's religious revival from 1978 onward and the felling ban in 1998, conservationists have established that biodiversity in Tibetan spiritscapes has recovered (Shen et al., 2015). Based on field research and a suite of participatory methods, it appears that the spiritual and cultural beliefs that support spiritscapes have also spontaneous recovered (Schwartz, 1994) but require international recognition and legal protection (see Studley, 2019; CSVPA, 2018g).

Governance

Spiritscapes are being governed by the resident spirits that are known and respected as the owners, custodians and governors of the flora and fauna within their jurisdiction. This form of governance, including the associated cultural and ritual behaviour of Tibetan lay society is known as spiritual governance (Bellezza, 1997). Not only do the resident spirits require honouring and thanking but they place behavioural

expectations on the local people as a contractual condition for providing personal protection and health, and success in hunting, trading, travel, farming, etc. Local people are responsible for conducting regular ritual audits to maintain spiritual balance and proper relationship with the resident spirits (Studley, 2014). This has become more of a challenge since the extinction of trance mediums (during the Cultural Revolution) that were known to mediate such relationships.

Management

Lay Tibetans are encouraged to ritually protect spiritscapes and flora and fauna and to adhere to behaviour and norms of cultural and spiritual significance which please the resident spirit. Doing so enables the resident spirit to govern the spiritscape and orchestrate human and ecological well-being. Under this arrangement, 'management' (more correctly nurture) by lay Tibetans includes ritual activities based on maintaining a relationship with the resident spirit which involve the headmen, trance mediums, divination specialists and local people. Because contemporary conservation management systems regard humans as the central actor in management, they often fail to recognise the cultural and spiritual significance of resident spirits in the management and nurture of Tibetan spiritscapes.

Lessons learned

 Recognise the importance and influence of resident spirits in the governance, management and nurture of spiritscapes and their role in recovering biodiversity and achieving nature conservation objectives.



A "karmic" waterfall for annulling sin, near Lower Yubeng, Tibetan Autonomous Prefecture, People's Republic, China. © John Studley 2013



A conic megalith that is a lha bon ritual site for offering and invocation to a Lha (deity) in order to protect people and their crops, and to dispense blessings. The rituals are related to the ancient religious beliefs of Bon - Lower Yubeng, Tibetan Autonomous Prefecture, People's Republic, China. - @ John Studley 2013

Quotes

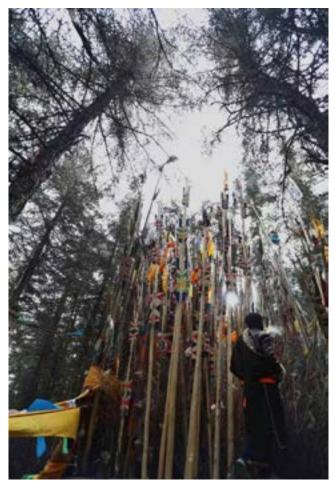
"If we protect the home and property of Jo Bo (name of a resident spirit in Tibetan), he will be happy and bless us with good health, good crop yields and wise leadership. If not, he will be angry and cause sickness, calamity, crop failure and disaster upon us and our community."

Tibetan Farmer, Upper Yangtze

Contributor

- John Studley, Independent Consultant and Ethno-forester, United Kingdom.

- Recognise the ritual nurture of spiritscapes by lay people and the protection work by monasteries contributes to the enhancement of biodiversity and the conservation of nature and environmental services (Shen et al., 2015).
- Recognise that the commercial values of forested spiritscapes are only a fraction of the total value to local people. This stands in contrast with intrinsic and spiritual values that are far more important, given that the forest is owned or presided over by a resident spirit.
- Do not ignore the cultural and spiritual significance of forests because this may lead to arson and antagonism, and local people may lose interest in nurturing the environment leading to very costly policing. In one case there was evidence of arson on 40 sites where the spiritual significance of forests had been ignored and one ethnic group had lost interest in nurturing the forest (Rowcroft et al., 2006).
- For most lay Tibetans the animistic spiritual importance of nurture is far more important than science-based nature conservation which to many lay Tibetans has no known equivalent in their culture and, not uncommonly, can be viewed negatively.
- The spiritual governance of spiritscapes is a very widespread practice. At least 25% of the Tibetan Plateau is comprised of spiritscapes nurtured on the basis of spiritual governance where the resident spirits protect habitats and flora and fauna (Shen et al., 2015; Studley 2019).
- Recognise that spiritscapes and spiritual governance are important in protected areas management and governance, nationally, internationally and by IUCN because spiritscapes are vulnerable to environmental degradation and sociocultural change.



A mountainside labtse for honouring and appeasing a gzhi bdag, comprised of 'arrows' (from each family) and cloth 'wind horses', near Donggo, Qinghai Province, Tibetan Autonomous Region (TAR), People's Republic, China. © Awang Jikmed

Case Study 3 Managing religious pilgrimage to sacred sites in tiger reserves in India

Summary

In India, there are many sacred sites within protected areas and tiger reserves. In recent years, visitor numbers to these sites and their impacts on biodiversity have escalated significantly. The National Tiger Conservation Authority has thus mandated that every tiger reserve develop plans to manage religious tourism (ATREE, 2015a). However, the challenges of balancing community visitation rights and nature protection have hindered implementation. We discuss the management model developed by Ashoka Trust for Research in Ecology (ATREE) and the Environment and The Alliance of Religions and Conservation (ARC) to address these challenges. This model is the first in India that assesses the impacts of religious tourism in tiger reserves, and broadens top down management by state authorities to engage multiple stakeholders. In Ranthambore and Kalakad Mundanthurai tiger reserves this has yielded encouraging results so far. A major breakthrough has been the reconciliation between park managers, religious authorities and civil society groups, facilitating interventions where responsibility is shared. These interventions, including awareness campaigns highlighting how conservation goals and religious beliefs are intimately aligned, have led to observed shifts in visitors' attitudes and behaviours (Elkin et al., 2019). As such, they underscore the potential of faith-based approaches to nature conservation in protected areas (see CSVPA, 2018d).



Ganesh Pilgrims on the Ranthambore Tiger Reserve forest path. Every day, hundreds of thousands of people are on pilgrimage to pay homage to sacred sites. A mapping exercise found no less than 50 sacred sites in the 13 tiger reserves [IUCN Category I] of the Western Ghats alone. © Alliance on Religions and Conservation

Governance

Tiger reserves enjoy the highest protection comparable to IUCN PA Management Category I. The National Tiger Conservation Authority oversees tiger reserves and has mandated that local forest departments develop plans to manage religious tourism. Balancing the interests of pilgrim visitation rights and protection of the parks' vulnerable biodiversity, however, has been challenging for implementation. Waste generated from what has become mass tourism, fuelwood cutting, disturbance to wildlife and plants from unrestricted movement, traffic, and noise and lights from religious festivals are increasing problems. Suggested restrictions to pilgrimage activities have caused friction between the stakeholders including religious groups, district authorities, the FD, local civil society, shopkeepers, and visitors.

Management

This project has led to multi-stakeholder management of religious tourism where responsibility is shared between government, religious and civil society actors. Forest Departments (FD) in both reserves are now integrating this approach into park management plans. Waste management, for example, has been of major concern, especially plastic. Through this process, the FD requested help from community stakeholders (Elkin et al., 2019). Civil society groups are now taking ownership of waste management with temples and local government; volunteers help enforce the plastics ban through a visitor frisking and outreach programme; women's cooperatives make cloth bags to replace polythene; and religious groups spread messages on the ban linking it with religious beliefs.

Lessons learned and best practices

Reconciling differing priorities related to pilgrimage in the tiger reserves has been a major breakthrough and the various stakeholders are currently managing pilgrimage in a more coordinated and participatory way. This, combined with awareness campaigns in both reserves linking conservation with religious values and beliefs are, we believe, responsible for favourable shifts in attitudes and behaviours of visitors in the parks observed during recent pilgrimage festivals. There is still work to be done to ensure the sustainability of this model but success so far has been a result of the following interventions:

- Incorporate religious partnerships in conservation approaches.
- Adopt a multi-stakeholder model to manage pilgrimage in tiger reserves and integrate it into annual park management plans.
- Launch multi-stakeholder committees to create plans for sustainable pilgrimage and to delegate responsibilities to different stakeholders including: local government, the forest department, conservation NGOs, civil society organisations, tourism operators, religious organisations and temple authorities.



Sorimuthaiyan festival in the core area of Kalalaka-Mundanthurai Tiger Reserve in Southern India. The annual festival brings approximately 200,000 pilgrims who take a dip in the Tampirabarani river which supplies water to three administrative districts. © Nayagam Kannan

- Raise awareness in civil society through faith-based conservation messages in awareness campaigns and through the media.
- Involve temples and religious groups, who are now greening temple areas and becoming involved in visitor outreach. Bringing them into dialogue in a respectful way that is sensitive to their needs has been critical.
- Monitor the impacts of pilgrimage through socio-economic and biodiversity surveys has begun but requires more attention. Obtaining more extensive research permissions to monitor the impact on biodiversity in pilgrimage areas will be important going forward.

Quote

"The pilgrim is usually not aware of how their actions are harming Mother Earth and all beings. It is our divine responsibility as leaders to spread this awareness, and to exhort people to ensure that every aspect of their religious pilgrimage and celebrations should be sacred and filled with devotion and care."

Swami Chidanand Saraswati, Spiritual Leader of Parmarth Niketan Ashram and inaugural Chair of the India Chapter of the Green Pilgrimage Network

Contributor

- Chantal Elkin, Head of the Beliefs & Values Programme at WWF International, former Director of Wildlife & Forests at ARC, United Kingdom.
- Sanjay Rattan, Allia nce of Religions and Conservation, India.
- Soubadra Devy, Ashoka Trust for Research in Ecology and the Environment, India.

Case Study 4 The cultural and spiritual significance of nature in interpretation, management, and governance at Great Smoky Mountains National Park, Southeast USA

Summary

Great Smoky Mountains National Park holds significant biodiversity and has great cultural and spiritual significance for the Cherokee as their ancestral homeland and for descendants of Scottish-Irish settlers. They created Appalachian culture and built culturally important buildings and graveyards throughout the park. The park is also important for outdoor enthusiasts and conservationists who find inspiration in nature (Bernbaum, 2007). The case study draws lessons and best practices from an innovative project that brought park management together with the Cherokee to develop a series of bilingual wayside signs illustrated by Cherokee artists linking natural features to Cherokee stories and traditions along a trail walked by the public and the Cherokee themselves.

The collaboration enabled the Cherokee to disseminate what they wanted known about their sacred sites and practices

and also helped to address health issues, to reinforce the teaching of their language, and pass their heritage to the younger generation (CSVPA, 2018c). The wayside signs also enabled them to reach the wider public with the messages they wished to disseminate about their sacred sites and practices. In addition, the waysides included quotes from other religions and traditions, such as Hinduism and Christianity, as well as scientific quotes. In addition, the positive aspects of working together on a project of mutual interest helped park management and the Cherokee to deal with a dispute over a controversial land swap.

Governance

As a National Park, Great Smoky Mountains is an IUCN PA Management Category II site. It was designated an International Biosphere Reserve in 1976 and inscribed as a World Heritage Site in 1983, under criteria N (1), (ii), (iii) and (iv) for its natural values. The US National Park Service under the Department of the Interior is in charge of the park. The adjacent Qualla Boundary, the ancestral homeland of the Cherokee, is owned and governed by the Eastern Band and held in trust for them by the Federal Government. Key areas of contention have to do with gathering of flora and fauna for traditional purposes by the Cherokee and disputes over a land swap between the Park and the Cherokee. These have direct implications for management.



Cherokee ceremony at Great Smoky Mountains National Park. © Edwin Bernbaum



Great Smoky Mountains National Park. © Edwin Bernbaum

Management

Great Smoky Mountains National Park is managed under a comprehensive management plan based on conservation zones. 92% of the Park is designated a natural zone. An additional 1% is set aside as an historic zone, and 7% as a development zone. Park management enforces regulations and there have been issues over traditional collection of certain flora and fauna by Cherokees and a contentious land swap. The Eastern Band of the Cherokee Nation is in charge of managing land adjacent to the park in the Qualla Boundary in North Carolina. The main land use and management problems lie just outside the Park, where rampant development has led to perhaps the most notorious gateway communities of any national park in the United States.

Lessons learned and best practices

- Promote mutual respect and appreciation for different traditions and points of view.
- Work closely with representatives of indigenous traditions to make sure that only the views and practices they want to reveal are made public.



A wayside panel in English and Cherokee on the Oconaluftee trail. Cherokee tradition holds that Cherokees have lived here since the creation, when the Great Buzzard formed the mountains and valleys of the region with his wingtips while fanning the soft, muddy new earth to dry it out and make it habitable (Duncan, 1998). © Edwin Bernbaum

- Develop projects on the cultural and spiritual significance of nature that benefit local people and communities as well as protect the environment.
- Make interpretation of indigenous views and contemporary traditions in the voices of traditional elders and storvtellers.
- Use artwork addressing the spiritual and cultural significance of nature to enhance interpretive messages and management policies.
- Generate multiple messages for different audiences rather than a single message, where feasible use languages appropriate for different audiences.
- Work on positive projects of common interest to all parties as a way of developing relationships that make it easier to work together on other, more contentious issues.

Quotes

"This is indeed a special project for the Park, for our interpreters and educators, and our visitors... These exhibits are very visible reminders of the spirit of cooperation that exists between the Park and the Eastern Band, and will serve the thousands of people who use this trail annually."

Dale Ditmanson.

Superintendent, Great Smoky Mountains National Park

"The more projects we have of this nature, the more confident we can be that our authentic Cherokee culture is appropriately represented and that our visitors enjoy the essence of the Cherokee way of life."

Michell Hicks.

Principal Chief, Eastern Band of the Cherokee

Contributor

- Edwin Bernbaum, Co-Chair IUCN WCPA Specialist group on Cultural and Spiritual Values of Protected Areas, USA.

Case Study 5 Recognising Millennia of Cultural and Spiritual Heritage at the Majella National Park, Abruzzo, Italy

Summary

The Majella National Park in Abruzzo, Italy, is an important biodiversity refuge. A sacred mountain since time immemorial, the area is characterised by a layered cultural and spiritual heritage shaped by human-environment interaction. Spiritual significance is attributed to the entire Majella Massif as well as to smaller features, especially grottos. Many caves were used already in pre-Christian times as dwellings, burials, worship sites, and shelters for mobile pastoralism (transhumance). After Christianization, they have been revered as hermitages and sites of divine apparitions, especially of St. Michael the Archangel (Frascaroli & Fjeldsted, 2018). Hermitic practice and contemplative monasticism became prominent and left an important mark on the area during the Middle Ages.

This is a complex legacy to conciliate with nature conservation, but the Majella National Park seems to have succeeded better than other Italian protected areas facing similar challenges: it enjoys higher support from local populations while still fulfilling conservation goals (De Waal, 2012). Integrating a plurality of cultural and spiritual values in its management has arguably been key to this success, based on three main actions: recognition that traditional activities are important heritage that can enhance biodiversity; zoning based on cultural as well as environmental indicators; and emphasizing historical

continuity between cultures and beliefs in landscape interpretation. Despite some enduring limitations, the experience of the Majella National Park is an important example for protected areas that overlap with deep cultural heritage (CSVPA, 2018f).

Governance

The Majella National Park is an IUCN type II protected area, governed by a public authority that responds to the Ministry of the Environment. Governance is aimed at transparently conciliating the interests of 39 municipalities and 6 mountain districts. Strategic planning is oriented through consultation with local administrators. Other major stakeholders include farmers, herders, tourist developers, and dioceses, although there is no evident mechanism for systematically including them in the governance of the National Park. Important areas of the Park fall within ancient privileges of customary law (usi civici, comparable to the commons) that should grant land governance and management to consortia of local residents. This occasionally engenders ownership conflicts between local institutions and the National Park Authority, as well as management conflicts between local uses (including animal grazing and forestry) and European Union Directives (Frascaroli & Verschuuren, 2016).

Management

The Park Authority manages the Park. Current management strategies are largely geared towards tourist promotion. Some management conflicts are known to arise between traditional activities (mountain agriculture, animal husbandry) and wildlife repopulation (De Waal, 2012). These may stem not only from material interests but



Hermitage of St Giovanni all'Orfento. Located at approximately 1220 m ASL in one of the areas of the Park designated as 'integral reserve', this is one of the most inaccessible sacred sites in all of the Maiella and one of the shelters used by Pietro da Morrone (the ascetic who later become Pope Celestine V). © Fabrizio Frascaroli



Ritual rubbing of the stone at the Hermitage of St Venanzio in occasion of the religious festival held in May to honour the Saint. Ritual reverence for water and stone are distinctive characters of folk spiritualities in the Majella area. © Katia Marsh



The Hermitage of St Onofrio near Serromonacesca. © Fabrizio Frascaroli

even competing worldviews. Other tensions exist around what cultural heritage to valorise, and what meaning(s) to emphasise. Local people are especially proud of their traditions and products; clergymen are often critical of folk devotions and rather stress monasticism and religious art. Park staff occasionally consider cultural heritage a management issue that clashes with the priorities of nature conservation. Traditional management techniques (e.g. silvo-pastoralism), although supported in theory, remain scarcely incentivised in practice.

Lessons learned/best practices

- Acknowledge cultural and spiritual values of nature in Park management and interpretation in order to make the Majella National Park stand out as one of Italy's protected areas enjoying the broadest possible support from local populations.
- Recognise that traditional activities are often a form of co-evolved heritage embedded in the spiritual worldviews of local populations, which can enhance biodiversity.
- Support traditional activities in park management through marketing networks and systems of mitigation of or at least fair compensation for wildlife damages. Recognise the role of traditional ritual practices for community cohesion and identity.
- Base zoning on cultural, not only environmental criteria. Majella National Park is divided in 4 zones with different management. In areas where meaningful interactions with the environment were never in place or have long disappeared, wilderness-inspired protection is implemented. In areas where meaningful humanenvironment interactions are present, priority is given to sustaining traditional uses (de facto as in IUCN type V protected area). This compromise permits to accommodate different and even competing values of nature along with conservation goals, and to respect the traditions that preceded institution of the protected area.
- Emphasise continuity between cultures and beliefs in landscape interpretation. The distinctive cultural elements of the Majella National Park - pastoralism, hermitic practice, monasticism, pre-Christian worships, folk traditions -

are strictly related, one having often paved the way to the others. In some cases, local productive activities encapsulate these relations. Underlining continuity between these histories allows to embrace multiple interpretations of a layered heritage and not exclude previous or alternative meanings. This also favours more inclusive and democratic relations among stakeholders.

- Integrate cultural heritage into Park management and activities across the responsible institutions. Ownership and care-taking responsibilities of the many monuments and historical sites in the Majella National Park are often divided between state, regional, and provincial offices, as well as ecclesiastical institutions. This can translate into inadequate daily management and lack of access opportunities for the Park visitors.
- Offer opportunities for further improving landscape interpretation and governance mechanisms.

Quotes

"Since time immemorial, the Majella Massif has hosted small farming and especially pastoralist communities. It has also offered an ideal seeing for hermits and mystics, who settled in the more isolated areas of the mountain, far from other humans, to live a life of prayer and contemplation. This religious presence has left a vivid mark in the culture of local communities and even nowadays it continues to permeate the landscapes of Majella and all of Abruzzi."

Maurizio Monaco,

Head of Visitor Experience Office, Majella National Park

"This was a land of shepherds and saints. But it was the shepherds who came first. The Bible tells it: the shepherds were the first to find Baby Jesus. No shepherds, no Baby Jesus."

> Domenico di Falco, Shepherd, Fara San Martino

Contributor

- Fabrizio Frascaroli, Lòm NGO, Rocca d'Arce, Italy.
- Department of Biological, Geological and Environmental Sciences, University of Bologna, Italy.

Case Study 6 The Tasmanian Wilderness World Heritage Area: Joint management of sacred creation country, Tasmania, Australia

Summary

The Tasmanian Wilderness World Heritage Area, or TWWHA country, is 1.58 million hectares and over onefifth the land mass of Tasmania. TWWHA country is a conglomerate of seven national parks and 45 other protected areas largely known for being the most substantial, intact temperate rainforest in the world. TWWHA holds four natural Outstanding Universal Values (OUVs) and three cultural OUVs. For us, Aboriginal Tasmanian peoples, TWWHA country is a place of landing - it is here that our first palawa (person) came to Earth in the form of a kangaroo man. A female creator ancestor also resides in the waters off TWWHA country. However, it is the ways in which we have cared for country, by the laws given to us by the creator ancestors, that comprise the cultural OUVs. By this, the cultural OUVs reflect the oldest, southernmost human occupation of over 40,000 years, where Pleistocene rock art is a tangible signifier of sacredness and fire management practices of over 30,000 years have shaped much of the natural OUVs (DPIPWE, 2016; Fletcher & Thomas, 2010).

When Aboriginal Tasmanian leadership is given the right to participate in protected area management, then good governance can occur. Our peoples know TWWHA country as the home of our creator and ancestral beings who left their sacred messages in the rock art and landforms that gave rise to our ways of life. Once we were the only peoples to care for TWWHA country, but then we were excluded under government processes and management plans. In 2016, a new plan of management for TWWHA country became the first time that any protected area in Tasmania became jointly managed with us. We were able to do this by respectfully working together with Tasmanian and Australian governments, and the World Heritage Committee, to demonstrate how our knowledges are best to conserve and promote the cultural values of TWWHA country (see CSVPA, 2018a).

Governance

We have been excluded, since first inscription in 1982, from conserving and promoting TWWHA country cultural OUVs according to our governance structures (Lee, 2016). Our peoples undertook advocacy to rectify this during the drafting of the new plan of management in 2014. The first joint management plan for any Tasmanian protected area resulted in 2016, where the Australian and Tasmanian governments statutorily approved the new plan of management for TWWHA country.

The joint management governance, between the Tasmanian government and Aboriginal Tasmanians, lies with a newly established cultural management group that sits within the Department of Primary Industries, Parks, Water and Environment. The cultural management group will act as an intermediary to link the management of natural and cultural OUVs, provide advice to the Director, and take a lead role in shepherding project and policy work in conjunction with us (DPIPWE, 2016).



The coastline at tebrakunna country, Tasmania, Australia. Source: © Jillian Mundy, permissions by DPIPWE

Management

In repairing the past neglect of cultural values, such that in 2012 less than 1% of the total TWWHA country budget was dedicated to the cultural OUVs (Australian Government, 2012), an additional \$575,000, for example, has been set aside by the Tasmanian government for further research into the cultural OUVs and consultation with our peoples. This research will aid in delivering the Key Desired Outcomes (KDOs) of the new plan, including assessing TWWHA country as an outstanding Aboriginal Cultural Landscape under the World Heritage Convention (DPIPWE, 2016).

Lesson learned and best practices

- The sacredness of TWWHA country infused our advocacy methods to focus on the relationships with stakeholders, rather than locked-in outcomes that left little room to build on strengths developed over the course of the plan.
- The key strategy of 'reset the relationship' a Tasmanian Government policy that was borne of our Aboriginal leadership (Lee & Hamilton, 2016) - guided our actions to further link the joint management of TWWHA country to constitutional recognition as First Peoples. Constitutional recognition was formally delivered in Tasmania a month after the TWWHA country plan of management became statutorily approved.
- To 'reset the relationship' meant that traditional authority, such as our Elders, was recognised as a legitimate governance structure by the government.
- To inform the public of our commitment, we distilled our advocacy message as a mantra of 'Culture not Politics, Families not Organisations, Relationships before Agreements'.
- At the heart of TWWHA country sacredness was our desire to use the symbols of rock art and creator beings as a means of collegial and non-adversarial advocacy that respected the rights of all people and a plurality of views to enjoin in good governance and sound management.

- In 2015, the Reactive Monitoring Mission from the World Heritage Committee stated that the comprehensive level of participatory engagement by us, on our own cultural terms, was noted as outstanding and "both the quality and the level of participation in the process appear high by global standards" (United Nations Educational, Scientific and Cultural Organisation, 2016 p. 10).
- As our Old People did for 40,000 years, we care for TWWHA country through respecting, knowing and enacting sacredness.

Quotes

"The challenge for us, as Aboriginal people, is to reconnect to Country in the TWWHA and to exercise, as individuals and as families, the opportunities this Management Plan presents to us. This Management Plan contains the keys for protecting our Country - good, strong governance made possible by improving our relationships with others tasked with managing the TWWHA."

Dr Aunty Patsy Cameron, Aboriginal Tasmanian Elder in the TWWHA management plan (2016)

"The legacy of our Ancestors can be seen in the cultural landscapes, including the area now known as the Tasmanian Wilderness World Heritage Area... We see the impact that has destroyed, and continues to destroy, Aboriginal heritage. And we see survival and regeneration among our people who gain strength from the spirits of our Ancestors."

> Rocky Sainty, former Chair of the Aboriginal Heritage Council

Contributor

- Tebrakunna country and Dr Emma Lee, Research Fellow, Swinburne University of Technology, Australia.



The case study author Dr. Emma Lee with her colleagues on needwonnee country, Tasmania, Australia. © Jillian Mundy

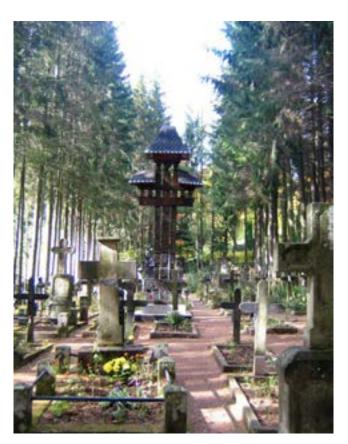


Shell midden at needwonnee country, Tasmania, Australia. © Jillian Mundy

Case Study 7 The cultural monastic landscape of Vânători Neamţ Nature Park, Romania

Summary

Vânători Neamț Nature Park is part of the wider cultural monastic landscape in the north-eastern Romanian Carpathian mountain range and added to the UNESCO tentative list as a Mixed World Heritage site. The site is an exceptional example of a cultural landscape developed and modelled by the continuous presence of religious communities. The whole Park can be considered a particular expression of the Christian monastic life within forested mountain habitats. It represents a unique combination of historical, cultural, religious and natural values, related to Orthodox Christianity. Since 1350, the area has hosted a vibrant, resilient and uninterrupted monastic tradition, including 16 monasteries and hermitages. The monastic population currently has about 1,100 monks and nuns which makes it the second largest Christian monastic concentration in the world after Mt. Athos in Greece. Monastic lifestyles in the Park include those of communities living in monasteries or monastic villages and also individuals in isolated hermitages or cells scattered in the mountains and forests. The Christian monastic tradition represents an exceptional example of harmonious interaction between local communities and extensive forest habitats. It is characterised by balanced management of natural resources and sustainable development ensuring the conditions for the conservation



The forest cemetery at Secu Monastery. © Josep-Maria Mallarach

of species, habitats and cultural landscapes. Park managers have fully assumed this rich religious heritage, integrating the cultural and spiritual values into the management activities (CSVPA, 2018g).

Governance

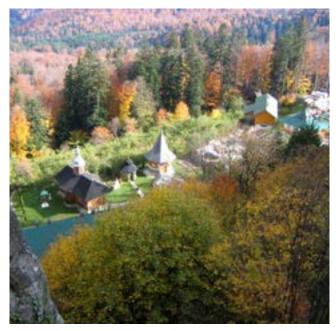
The Vânători Neamţ Natural Park was established by the Government of Romania in 1999, mostly over Government-owned lands. Since its inception, the Park has been administered by Romsilva, the National Forest Administration. After the end of the Communist regime, a process of land restitution began, and currently about 30% of the Park is owned by monastic communities. The main stakeholders are the monastic administrations, the local authorities and educational units. The management plan needs to be approved by the Scientific Council and the Consultative Council under the Romanian Government – which includes key stakeholders and facilitates their interests – before it is approved by the Minister.

Management

The Nature Park covers an area of approximately 31,000 ha, of which 85% is forest and corresponding with IUCN protected area management category V: Protected Landscape. The management plan assumes that the protection and conservation of the natural, cultural and spiritual heritage are complementary. It operates on the assumption that the protection of spiritual values and features such sacred sites works best when the surrounding natural heritage is also being well conserved. The existence of sacred sites further implies that environmental protection has a spiritual component. This is illustrated by the development of awareness raising activities and ecotourism strategies that transform masstourism to the main monasteries by road and car into a spiritual experience by visiting the significant and less significant sites on foot along ancient pilgrimage routes and nature trails.

Lessons learned and best practices

- Positive management evaluations testify to the success and validity of the integrated approach to the conservation of natural, cultural and spiritual values and features which can be used to support its application elsewhere (Bellisari et al., 2017).
- The cultural and spiritual significance of nature has been integrated as part of a holistic approach adopted in the vision, goals and management actions for the Park. As a result, the management objectives of the Park include supporting local communities in preserving cultural and spiritual values of the region and jointly promoting the natural, spiritual, traditional, historical and cultural values.
- The cultural and spiritual significance of nature have subsequently also been integrated in various activities of the park, such as visitor interpretation, environmental education, sacred natural sites protection, and recreation demonstrating the importance of the Christian monastic tradition on nature conservation.



View of the new Skitul Sihla, under construction in 2007, from the ancient hermitage. © Josep-Maria Mallarach



Local pilgrims entering the outer gate of the Sihastria Monastery. © Josep-Maria Mallarach

- Including the concept of sacred natural sites in the Management Plan of the Nature Park helped represent and secure the strong connection between the ancient monastic model of land use and the actual landscape and biodiversity conservation model.
- Emphasizing the sacredness and spiritual significance of endangered species is a necessary step in the attempts to protect the wildlife. In the educational and support campaigns, the protected area tries to revive spiritual values for the species that are the subject of our conservation efforts, for example, European bison, some bird species, social insects, etc. (Cătănoiu, 2012)
- Monasteries and hermitages have great potential for the practical implementation of the Christian Orthodox approach to ecology. Including spiritual principles in nature conservation as well as using these principles for awareness raising among visitors is done in several places, including the skitul (small monastery) of Vovidenia located in the same Nature Park (Mallarach et al., 2016).
- In order to reinforce the awareness of the spiritual values of the protected area, we draw examples from past spiritualities and religions of the region. Our visitor interpreting plan does not solely draw on the Christian Orthodox spirituality, it also includes elements from the significant Cucuteni culture (a Neolithic-Eneolithic culture, developed between 5200-3500 BC in Eastern Europe, from the Carpathian Mountains to the Dnieper and Dniester regions), which make clear connections between nature and Neolithic spirituality.

Quotes

"If man does not think to respect nature as a creation of God, all humanity will suffer."

> Archimandrite Benedict. abbot of Neamt Monastery, Romania

"If we love any of the four kinds of living creatures descending from God (angels, humans, animals, plants) they can ascend us, who are rational beings and have mind, word and spirit, on the steps of the spiritual ascension, toward God."

> Father Cleopa, former abbot of the Sihastria Monastery, Romania

Contributors

- Sebastian Catanoiu, Manager of the Vânători Neamț Nature Park, Romania. Member of the IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas and the Delos Initiative, Romania.
- Benedict Sauciuc, Archimandrite and Abbot of Neamt Monastery, forest inspector of the Eparchial Council of Metropolitan Church of Bukovine and Moldavia, Romania.

Case Study 8 System level conservation based on the coexistence of beliefs related to the Kii Mountain Range, Japan

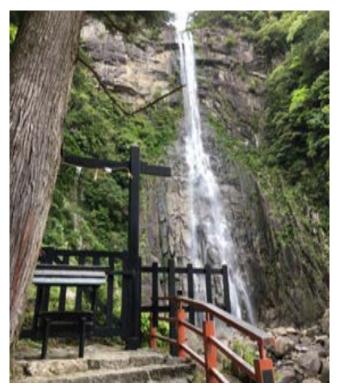
Summary

The Kii Peninsula in the South-West of Honshu island in Japan represents the heart of the spiritual development of Japanese nation. The region hosts some of the most important sacred mountains in the country, that are part of the Yoshino-Kumano National Park, IUCN protected area management category II, core of the Mount Odaigahara, Mount Omine and Osugidani Biosphere Reserve. These mountains exemplify the historical process in which Buddhist and Daoist traditions arriving from China and the Korean peninsula merged with Shinto beliefs in which natural features such as waterfalls, special trees and giant rocks are considered dwellings for gods or 'kami'. Shugendo, representing the ultimate syncretism (see Glossary) of these different traditions, that is the merging of some of their doctrines and practices, is centred around the spiritual experience of climbing of mountains (ACAMEGJ, 2003). These mountainous areas contain places of scenic beauty, historic towns, national treasures and natural monuments which are protected under the Law for the Protection of Cultural Property. The cherry forests in Yoshino mountain are an inspiration for Japanese poets and, due to their sacred character, some primeval forests have been conserved under strict felling prohibitions. The World Heritage Cultural Landscape of the Sacred sites and Pilgrimage Routes in the Kii Mountain Range was inscribed in the World Heritage List in 2004 (UNESCO, 2003b), recognising the Outstanding Universal Value of the cores of three of the most significant religions in Japan: Shintoism in Kumano-Sanzan, Shingon Buddhism in Koyasan and Shugendo in Yoshino and Omine, and the pilgrimage routes connecting them (ICOMOS, 2004).

This case study describes how layers of protection interrelate in the management of both cultural and natural heritage, illustrating a system-level conservation of nature and culture, based on coexisting spiritual values.

Governance

The Agency for Cultural Affairs that enforces the Law for the Protection of Cultural Property leads the governance. However, the property is contained and contains areas that are part of the Yoshino-Kumano National Park which administration is in charge of the Ministry of the Environment and the three prefectures that are related to it: Wakayama, Nara and Mie, and their local authorities. The Three Prefectures' Council for the World Heritage Sacred Sites and Pilgrimage Routes in the Kii Mountain Range was first established to pursue the nomination and inscription and is now in charge of coordinating its conservation.



A Shinto shrine at a waterfall along a pilgrimage route at the Kii Mountain range.

© Maya Ishizawa

Management

The management is in charge of a diversity of entities, including the Agency for Cultural Affairs and the Ministry of the Environment, in coordination with the Boards of Education of the three prefectures, and the boards of education of each municipality included in the World Heritage property (ACAMEGJ, 2003). Shinto shrines and Buddhist Temples are managed by religious organisations and are in charge of their conservation. Depending on their location, pilgrimage routes are owned by individuals, local or national governments who take care of their maintenance. Local inhabitants and Non-Profit Organisations (NPO) participate as well in the restoration, conservation and maintenance of some of the pilgrimage routes.

Lessons learned/best practices

- Organise regional capacity building workshops on natureculture linkages in heritage conservation to enable crosslearning from the expertise and experiences of partaking professionals and students (Ishizawa et al., 2019).
- Arrange site visits to biocultural landscapes where participants can learn about protection and management systems directly from authorities, site managers and local population related to the conservation of heritage sites.
- Facilitate site visits and workshops to experience the sacred mountains and improve understanding of the spiritual values of the Japanese people such as:

- · The value of the continuous cultural practices that reflect a harmonious relationship between people and the natural environment.
- · The coexistence of religions for which the natural environment plays a foundational role.
- · The positive involvement of local communities in the conservation and maintenance of pilgrimage routes and surrounding natural areas.
- Manage tourist numbers in accordance with opportunities for local people in rural areas and their practices of rituals and spirituality in the Kii Mountains such as:
 - · Shugendo priests and *yamabushi* are integrated in the community which brings spiritual practices closer to local people,
 - · Buddhist monks in Koyasan are opening their monasteries to host tourists and pilgrims, thus sharing religious values related to the respect and conservation of sacred landscapes.
 - · Increasing tourism at pilgrimage routes and sacred sites, resulting from the international World Heritage designation, may generate undesired traffic and pollution in the higher seasons.

- · Acknowledge the role of spiritual values in the conservation of nature through bringing together three religious communities in order to support the nomination and inscription of the heritage of the Kii Mountains, as sacred mountains in the World Heritage.
- · Involve multiple stakeholders, religious institutions, the Agency for Cultural Affairs, the Ministry of Environment as well as three prefectures in the management and governance of integrated natural and cultural heritage.

Quotes

"I'll forget the trail I marked out on Mount Yoshino last year, go searching for blossoms in directions I've never been before."

Poem by Saigyo

Contributors

- Maya Ishizawa, University of Tsukuba, Japan.



A view over the Kii mountain range. © Maya Ishizawa

Case Study 9 Incorporating place-based values into sustainability measures in Western Province, Solomon Islands

Summary

In Solomon Islands, spiritual values play an important role in mediating experience and use of the environment. However, these are rarely reflected in the national indicators of sustainability and development which can result in problems (e.g. requiring conservation land to be under formal protection rather than under indigenous management). In many places, families of the current inhabitants have lived on the land for many generations, and this archaeological heritage forms part of the contemporary lived landscape (Walter & Hamilton, 2014). These sites represent physical links with the past and are commonly a focus for protection and a flashpoint of disputes over land and resource extraction. Values held by community members do not reflect those commonly held by national and international groups (NGOs, donor agencies, etc.), but instead reflect histories that are deeply embedded in the land and seascape.

This case study outlines an initiative to develop locally grounded indicators of well-being with communities at four sites in Western Province of Solomon Islands (Fig. 1). The project (a collaboration between the communities, the American Museum of Natural History, Solomon Islands Community Conservation Partnership and the Wildlife Conservation Society) applies a biocultural approach to identify local definitions of well-being, establish communitybased actions, and translate local definitions of success to national sustainable development planning (see also McCarter et al., 2018).

The well-being indicators developed at several sites across the Western Province included reference to these cultural, spiritual and historical values of nature. They include metrics of the perceived vitality of transmission of language; knowledge of markers on the landscape; the ability of younger generations to learn traditional knowledge and practice (e.g. weaving); and the strength of transmission of songs, stories and dance. The specifics of the metrics vary across the sites (e.g. to which weaving practices they refer), and there are challenges to use of indicators and scaling them from local to national scales (Sterling et al., 2017).

Governance

Grounded indicators of well-being include reference to effective governance. Community land is designated as 'customary land' (as with 87% of land in Solomon Islands) and is managed under customary governance structures within genealogical or tribal groups, while two are managed as de facto ICCAs. Customary governance structures are valued for their legitimacy and fit for place, but are challenged by aspects of contemporary life, including pressures towards economic development and changing values. Governance is largely based on genealogical groupings, with leadership typically being provided by customary chiefs or elected chairmen. Village governance is complemented by the strong role of different Christian denominations, including Seventh Day Adventist and United Methodist in guiding both village-level planning decisions and individual lifestyles. Where land and sea are owned and managed by indigenous people, these are sometimes classified as Community Conserved Areas (governance type D. in IUCN guidelines); while in some other areas, sectors of the community are working to establish equitable governance structures targeted towards the maintenance of resources.



Crafting a dugout canoe at Solomon Islands. © Joe McCarter

Management

Day to day management of natural resources is conducted by village-level committees, who oversee, with the chief's guidance, the use, monitoring and enforcement of restrictions. This is often in collaboration with external organisations based in the capital (Honiara) or overseas. The committees have had differing degrees of success in incorporating cultural and spiritual values of nature, mostly because of varying quality of local governance and market access. At the very least they are seeking to maintain use values of the land and seascape.



Local community members are conducting a planning exercise at Solomon Islands. © Joe McCarter

Lessons learned and best practices

- Understand that for communities the importance of maintaining land- and seascapes is important primarily because of the need to maintain connection to markers of the past (sacred or taboo sites), in addition to the utilitarian and biodiversity values that are also associated with indigenous territories.
- Follow a biocultural approach to developing sustainability indicators to take into account place-based cultural and spiritual values associated with the environment for use in natural resource management.
- Acknowledge that there can be a mismatch between place-based well-being and national metrics of progress. External partners seeking development and conservation outcomes need to be aware of and account for these gaps. Poorly-fitted metrics will make for programming that can ultimately undermine local resilience.
- Design responsive local, regional and national conservation and development strategies that fit with local values and well-being including intangible, cultural and spiritual components.
- Work in appropriate timescales to allow for the building of locally-appropriate programming in conservation and development.
- Investing in building relationships in order to overcome donor timelines and work in timescales appropriate for the community.

- Include the areas of education, justice and organised religion in interdisciplinary approaches to resource management planning and realise that this is based in overlapping dimensions of knowledge, practice and belief. - Resource management initiatives should recognise not only cultural and spiritual values but also the diversity of use values associated with landscapes (Govan & Jupiter, 2013).

Quotes

"As an Isabel islander walks through the forest, moving between named sites and places, history is revealed and the journey helps structure or reinforce individual and group identity. This is not just an interesting abstract notion; it plays a pivotal role in determining the actions and decision making of Isabel communities in relation to their environment."

> Walter and Hamilton, 2014, p. 2

"An old chief of Marovo Lagoon, in Solomon Islands explained the customary 'laws' to fishing: 'That always changes. What we have to do is always different, and we cannot write down laws like the English do, in books that have one law for every little thing. No, we do not write that down, because everything is different, and our laws have to fit that'..."

> Hviding, 1998, p. 255

Acknowledgements

We thank colleagues, partners and landowners at the sites, the National Science Foundation (grants No. EF-1427091 and 1444184), the Gordon and Betty Moore Foundation, the Jaffe Family Foundation, The John D. and Catherine T. MacArthur Foundation (grant 13-105118-000-INP) and The Tiffany & Co. Foundation.

Contributors

- Joe McCarter, Center and Biodiversity and Conservation, American Museum of Natural History Melanesia Programme, Wildlife Conservation Society, USA.
- Eleanor Sterling, Center and Biodiversity and Conservation, American Museum of Natural History Melanesia Programme, USA.
- Stacy Jupiter, Wildlife Conservation Society, USA.



Resources





Hiker contemplating Peak Dolomites, Italy. © Edwin Bernbaum

References

ACAMEGJ (2003). World Heritage List Nomination, Japan: Sacred Sites and Pilgrimage Routes of the Kii Mountain Range and the Cultural Landscapes that Surround them. Tokyo: Agency for Cultural Affairs and Ministry of the Environment Government of Japan.

Adamson, D. (2013). River out of Eden, Water Ecology and the Jordan River in the Christian Tradition. Amman: EcoPeace / FoEME.

Adamson, D. (2013b). River out of Eden, Water Ecology and the Jordan River in Islam. Amman: EcoPeace / FoEME.

Adamson, D. (2013c). River out of Eden, Water Ecology and the Jordan River in the Jewish tradition. Amman: EcoPeace / FoEME.

Australia ICOMOS (2013). The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance. ICOMOS, Burwood.

Aitpaeva, G. (2013). Sacred Sites of the Southern Kyrgyzstan: Nature, Manas, Islam. Bishkek: Maxprint.

ATREE (2015a). Sustainable Green Religious Tourism, Ranthambore Tiger Reserve. A report submitted to Rajasthan Forest Department and community stakeholders. Bangalore: ATREE.

Barcalow, K. and J. Spoon (2018). 'Traditional Cultural Properties or Places, Consultation, and the Restoration of Native American Relationships with Aboriginal Lands in the Western United States'. *Human Organization*. 77(4): 291–301. https://doi.org/10.17730/0018-7259.77.4.291

Bellisari, L., Deodati, T., Olmeda, C., and Guimarães, A. (2017). In: *Vanatori Neamt. Linking Natura 2000 and cultural heritage*, pp. 45–48. Luxembourg: Case studies, Publications Office of the European Union.

Bernbaum, E. (2007). 'Great Smoky Mountains (Shagonage) and Qualla Boundary Tennessee and North Carolina, Southern Appalachian Mountains, United States of America'. In: J.M. Mallarach and T. Papayannis (eds) *Protected Areas and Spirituality, Proceedings of the First Workshop of The Delos Initiative*, pp. 201–117. Gland and Barcelona: IUCN and Publicacions de l'Abadia de Montserrat.

Bernbaum, E. (2017). 'The Spiritual and Cultural Significance of Nature: Inspiring Connections between People and Parks'. In: S.R. Beissinger, D.D. Ackerly, and H. Doremus (eds.) *Science, Conservation and Parks*, pp. 294–311. Chicago: University of Chicago Press. https://doi.org/10.7208/chicago/9780226423142.003.0014

Bernbaum, E. (2019). 'The cultural and spiritual significance of nature: Involving the general public in the management and governance of protected areas'. In: B. Verschuuren and S. Brown (eds.). Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy, pp. 133–147. Abingdon and New York: Routledge. https://doi.org/10.4324/9781315108186-9

Bille Larsen P. (2018). '(Re)structuring Rights and World Heritage Dynamics and Looking Towards the Future'. In: P. Billie Larsen. (ed.). World Heritage and Human Rights: Lessons from the Asia-Pacific and Global Arena. London: Routledge. https://doi.org/10.4324/9781315402789-16

Borrini-Feyerabend, G., Dudley, N., Jaeger, T., Lassen, B., Pathak Broome, N., Phillips, A., and Sandwith, T. (2013). *Governance of Protected Areas: From understanding to action.* Best Practice Protected Area Guideline Series No. 20. Gland, Switzerland: IUCN. https://portals.iucn.org/library/node/29138

Bridgewater, P., & Rotherham, I. D. (2019). 'A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation'. *People and Nature*, 1(3), pp. 291–304. https://doi.org/10.1002/pan3.10040

Brown, S. (2010). *Cultural landscapes. A practical guide for park management*. Canberra: NSW Department of Environment, Climate Change and Water.

Brown, S. and Verschuuren, B. (2019). 'Cultural and Spiritual Significance of Nature in Protected and Conserved Areas: The "deeply seated bond". In: B. Verschuuren & S. Brown, S. (eds.) *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy*, pp. 1–17. Abingdon and New York: Routledge.

Buckley K. (2019). 'Exploring the usefulness of nature/culture convergences in World Heritage: The case of authenticity.' In: B. Verschuuren & S. Brown, S. (eds.) *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy*, pp. 85–101. Abingdon and New York: Routledge. https://doi.org/10.4324/9781315108186-6

Byrne D., Goodall H. (2013). 'Place-making and transnationalism: Recent migrants and a National Park in Sydney, Australia'. Parks: *The International Journal on Protected Areas and Conservation* 19 (1): 64-72. https://doi.org/10.2305/IUCN.CH.2013.PARKS-19-1.DB.en

Cătănoiu, S., (2007). 'Study case of Vanatori Neamt Nature Park.' In: Mallarach, J.-M., Papayannis, T. (eds), *Protected Areas and Spirituality: Proceedings of the First Workshop of the Delos Initiative, Montserrat 2006*, pp. 289–311. Gland, Switzerland and Montserrat, Spain: IUCN and Publicacions de l'Abadia de Montserrat.

Cătănoiu, S. (2012). 'Different stories of two sacred species of Moldavia, Romania: the European bison and the brown bear'. In: Pungetti, G., Oviedo, G., Hooke, D. (Eds.), *Sacred Species and Sites- Advances in Biocultural Conservation*, pp. 380–383. Cambridge: Cambridge University Press.

CPRE (2018). Campaign to Protect Rural England. Available from: https://www.cpre.org.uk/ (Accessed February 2018).

CSVPA (2018a). CSVPA Best Practice Case Study: The Tasmanian Wilderness World Heritage Area: Joint management of sacred creation country, Tasmania, Australia. Available from: https:// csvpa.org/library/the-tasmanian-wilderness-world-heritage-area/ (Accessed: March 2018)

CSVPA (2018b). CSVPA Best Practices Case Study: Nuwuvi Ancestral Territory. Available from: https://csvpa.org/library/nuwuviancestral-territory/ (Accessed: June 2016).

CSVPAc (2018c). CSVPA Best Practice Case Study: The Cultural and Spiritual Significance of Nature in Interpretation, Management, and Governance at Great Smoky Mountains National Park, Southeast USA. Available from: https://csvpa.org/library/great- smoky-mountains-national-park/ (Accessed: December 2016).

CSVPA (2018d). CSVPA Best Practices Case Study: Towards Best Practices in Managing Religious Pilgrimage to Sacred Sites in Indian Tiger Reserves. Available from: https://csvpa.org/library/sacredsites-in-indian-tiger-reserves/ (Accessed: August 2017).

CSVPA (2018e). CSVPA Best Practices Case Study: Integrating the spiritual values, sacred sites and cultural framework of the Bakonzo, the Mountain People, into the management of Rwenzori Mountains National Park, Uganda. Available from: https://csvpa.org/library/ rwenzori-mountains-national-park-uganda/ (Accessed: August 2017).

CSVPA (2018f). CSVPA Best Practices Case Study: The cultural monastic landscape of Vanatori Neamt Nature Park, Romania. Available from: https://csvpa.org/library/vanatori-neamt-nature-park- romania/ (Accessed: August 2017).

CSVPA (2018g). CSVPA Best Practices Case Study: Tibetan Spiritscapes and Spiritual Governance in Southwest China. Available from: https://csvpa.org/library/tibetan-spiritscapes/m (Accessed: August 2017).

CSVPA (2018h). CSVPA Best Practices Case Study: Aspirations for creating systems of conserved areas to protect ground water through the cultural importance of Sacred Maya Cenotes in Yucatan, Mexico. Available from: https://csvpa.org/library/ protecting-sacred-maya-caves/ (Accessed: August 2018).

Dobson, J. and Mamyev, D. (2010). 'Sacred Valley, Conservation Management and Indigenous Survival: Uch Enmek Indigenous Nature Park, Altai Republic, Russia.' In Verschuuren, B., Wild, R., McNeely, J., & Oviedo, G. (eds). Sacred Natural Sites: Conserving Nature and Culture, pp. 244–253. London: Earth Scan.

Dudley, N., Shadie, P., and Stolton, S. (2008). Guidelines for applying protected area management categories including IUCN WCPA best practice guidance on recognising protected areas and assigning management categories and governance types. Gland, Switzerland: IUCN. https://doi.org/10.2305/IUCN.CH.2008.PAPS.2.en

Duncan, B. R., ed. (1998). Living Stories of the Cherokee. Chapel Hill and London: The University of North Carolina Press.

De la Torre, M., ed. (2002). Assessing the Values of Cultural Heritage: Research Report. Los Angeles: The Getty Conservation Institute. Available at: https://www.getty.edu/conservation/ publications resources/pdf publications/pdf/assessing.pdf (Accessed June 2017).

De Waal, V. (2012). 'The Cultural and Spiritual Sites of the Parco Nazionale Della Majella, Italy.' In: J. M. Mallarach, T. Papayannis, R. Väisänen (eds.) The Diversity of Sacred Lands in Europe: Proceedings of the Third Workshop of the Delos Initiative, Inari/ Aanaar, pp. 111-123. Gland, Switzerland: IUCN.

Denver, K., Akojiam, Y., M. Kenza Ali, M., Khurelbaatar, S., Ovjedo, G., and Young, L. (2018). Learning from Experience: How indigenous peoples and local communities contribute to wetland conservation in Asia and Oceania. Gland, Switzerland: Ramsar Convention Secretariat.

DPIPWE (2016). Tasmanian Wilderness World Heritage Area Management Plan. Hobart, Tasmania: Department of Primary Industries, Parks, Water and Environment.

Dhimurru (2015). Dhimurru Indigenous Protected Area Plan of Management 2015-2022. Dhimurru, Nhulunbuy.

Director of National Parks (2010). Uluru-Kata Tjuta National Park: Management Plan 2010-2020, Tjukurpa Katutja Ngarantja. Department of the Environment, Water, Heritage and the Arts, Uluru-Kata Tjuta Board of Management.

EcoPeace (2015) Regional NGO Master Plan for Sustainable Development in the Jordan Valley. Available from: https:// ecopeaceme.org/uploads/Regional_NGO_Master_Plan_Final.pdf (last accessed December 2019).

Elkin, C., Rattan, S., Devy, S., and Thyagarajan, G. (2019). 'Managing Religious Pilgrimage to Sacred Sites in Indian Protected Areas'. In: Verschuuren, B. and Brown, S. (eds.) Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy, pp. 208–222. Abingdon and New York: Routledge. https://doi.org/10.4324/9781315108186-14

Feary, S., Brown, S., Marshall, D., Lilley, I., McKinnon, R., Verschuuren, B. & Wild, R. (2015). 'Earth's cultural heritage'. In: G. L. Worboys, M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds.). Protected Area Governance and Management, pp. 81–116. Canberra: ANU Press.

Finke, G. (2013). Linking Landscapes. Exploring the relationships between World Heritage cultural landscapes and IUCN protected areas. Gland, Switzerland: IUCN.

Fletcher, M.S., & Thomas, I (2010). 'The origin and temporal development of an ancient cultural landscape'. *Journal of Biogeography* 37(11): 2183-2196. https://doi.org/10.1111/j.1365-2699.2010.02363.x

Frascaroli, F., and Fjelsted, T. (2019). 'Exploring Spiritual and Religious Values in Landscapes of Production: Lessons and examples from Italy'. In: Verschuuren, B. & Brown, S. (eds.) *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management, and Policy.* Abingdon and New York: Routledge.

Frascaroli, F., and Verschuuren B. (2016). 'Linking biocultural diversity and sacred sites: evidence and recommendations in the European framework'. In: M. Agnoletti and F. Emanueli (eds.) *Biocultural Diversity in Europe*, pp. 389–417. Cham: Springer International. https://doi.org/10.1007/978-3-319-26315-1-21

Gavin, M.C., McCarter, A. Mead, F., Berkes, F., Stepp, J.R. Peterson D., & Tang, R. (2015). 'Defining biocultural approaches to conservation'. *Trends in Ecology & Evolution* 30: 140–145. https://doi.org/10.1016/j.tree.2014.12.005

Glémet R., Moore P., Phommachanh K., & Pholsena M. (2016). 'Customary laws governing the sacred natural sites of the Xe Champhone Ramsar Site in Lao PDR: Implications for site management'. In: B. Verschuuren & N. Furuta (eds.) *Asian Sacred Natural Sites: Philosophy and Practice in protected Areas and Conservation* pp. 95–106. London: Routledge.

Gardashuk, T. (2012). International Hutsul Festivals: Restoration of local traditions and contribution to the European common heritage. In: Mallarach, J.M., (ed.) Spiritual Values of protected Areas of Europe. Workshop Proceedings, pp. 119–128. Bonn: German Federal Agency for Nature Conservation, BfN-Skripten.

Gorenflo, L.J., Romaine, S., Mittermeier, R.A., and Walker-Painemilla, K. (2012). 'Co-occurrence of linguistic and biological diversity in biodiversity hotspots and high biodiversity wilderness areas'. *Proceedings of the National Academy of Sciences PNAS*, 109: 8032-8037. https://doi.org/10.1073/pnas.1117511109

Govan, H., and Jupiter, S. 2013. 'Can the IUCN 2008 Protected Areas Management Categories Support Pacific Island Approaches to Conservation?' *Parks: The International Journal on Protected Areas and Conservation*, 19(191): 73–80. https://doi.org/10.2305/UCN.CH.2013.PARKS-19-1.HG.en

Graham, J, Amos, B., and Plumptre, T. (2003). *Governance* principles for protected areas in the 21st century. Ottawa: Institute on Governance.

Groves, C., & Game, E. T. (2016). *Conservation planning: informed decisions for a healthier planet*. Totnes, UK: Roberts Publishers.

Hamilton, L.S. (1993). *Ethics, Religion and Biodiversity: Relations between Conservation and Cultural Values*. Cambridge: White Horse Press.

Harmon, D. and Putney, A.D. (2003). *The Full Value of Parks: From Economics to the Intangible*. Lanham: Rowman and Littlefield.

Harrison N., and Harrison H.M. (1995). *Green Heart Vision*. Santa Cruz: The Harrison Studio. Available from: http://theharrisonstudio.net/art-projects-2 (Accessed July 2019).

HPHP Central (2018). *Healthy Parks Healthy People Central*. Available from: https://www.iucn.org/sites/dev/files/content/documents/improving-health-and-well-being-stream-report 0.pdf (Accessed March 2018).

Hiebert, P. G. (2008). *Transforming worldviews: An anthropological understanding of how people change*. Ada: Baker Academic.

Higgins-Zogib, L. (2005). 'Qadisha Valley and the Forest of the Cedars of God, Lebanon'. In: N. Dudley, L. Higgins-Zogib and S. Mansourian (eds.) *Beyond Belief*, pp. 85–87. Gland, Switzerland: WWF.

Hilty, J. A., A. T. H. Keeley, W. Z. Lidicker, and A. M Merenlender. 2019. *Corridor Ecology*. Second Edition. Washington DC: Island Press.

Hviding, E. (1998). 'Contextual flexibility: present status and future of customary marine tenure in Solomon Islands'. *Ocean & Coastal Management* 40(964): 253–269. https://doi.org/10.1016/S0964-5691(98)00042-8

ICCA Consortium (2018). *Indigenous and Community Conserved Areas Consortium*. Available from: https://www.iccaconsortium.org/ (Accessed March 2018).

ICOMOS (1994). *The Nara Document on Authenticity*, Available from: https://www.icomos.org/charters/nara-e.pdf (Accessed: February 2018).

ICOMOS (2004). Evaluations of Cultural Properties – [C 1142] – Sacred Sites and Pilgrimage Routes in the Kii Mountain Range, and the Cultural Landscapes that surround them, pp. 34–42 Paris: ICOMOS. Available from: http://whc.unesco.org/archive/2004/whc04-28com-inf14ae.pdf

ICOMOS (2008). Québec City Declaration on the Preservation of the Spirit of Place. Available from: https://whc.unesco.org/uploads/activities/documents/activity-646-2.pdf (Accessed July 2019).

ICOMOS (2017). Yatra aur Tammanah. Learnings & Commitments from the Culture-Nature Journey, 19th ICOMOS General Assembly, Delhi 2017. Available from: https://www.icomos.org/images/DOCUMENTS/Working Groups/SDG/ICOMOS-IUCN 2017_Culture Nature Journey-Yatra aur Tammanah.pdf (accessed August 2018).

ICOMOS, ICCROM, IUCN and UNESCO World Heritage Centre (2010). Guidance on the preparation of retrospective Statements of Outstanding Universal Value for World Heritage Properties, IUCN, Gland, Available from: https://www.iucn.org/sites/dev/files/import/downloads/whouven.pdf (Accessed March 2018).

Infield, M. (2013). 'Sacred sites and conservation of the Rwenzori Mountains in Uganda, Conservation news'. Oryx, 47(1): 13–18. https://doi.org/10.1017/S0030605312001597

Infield, M., Morse-Jones, S., and Anthem, H. (2015). Guidelines for the Rapid Assessment of Cultural Ecosystem Services (GRACE): Version 1. A report by Fauna & Flora International. IUCN (1980) World Conservation Strategy, Gland: IUCN, UNEP, and WWF. Available from: https://assets.fauna-flora.org/wp-content/ uploads/2017/11/FFI 201508 Guidance-for-the-rapid-assessmentof-cultural-ecosystem-services.pdf (Accessed March 2018).

Interreg Europe (2019). Green Pilgrimage. Available from: https:// www.interregeurope.eu/greenpilgrimage/ (Accessed July 2019).

IPAS (2019). Indigenous Protected Areas. Available form: https:// www.environment.gov.au/land/indigenous-protected-areas (Accessed July 2019).

IPBES (2016). Preliminary guide regarding diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services. Kuala Lumpur: IPBES. Available from: https://seea.un.org/content/preliminary-quideregarding-diverse-conceptualization-multiple-values-nature-and-its (Accessed March 2018).

IPBES (2019). IPBES Conceptual Framework. Available from: https://ipbes.net/conceptual-framework (accessed February 2019).

Ishizawa, M.; Inaba, N. and Yoshida, M. (2019) Proceedings of the Second Capacity Building Workshop on Nature-Culture Linkages in Heritage Conservation in Asia and the Pacific 2018. Journal of World Heritage Studies, University of Tsukuba, Tsukuba.

IUCN (2003). The Durban Accord: Vth IUCN World Parks Congress, Durban, South Africa. Gland, Switzerland: IUCN.

IUCN (2004) Resolution: 3.020 Drafting a code of ethics for biodiversity conservation. Available from: https://portals.iucn.org/ library/sites/library/files/resrecfiles/WCC_2004_RES_20_EN.pdf (Accessed December 2019).

IUCN (2008) Res 4.099: Recognition of the diversity of concepts and values of nature. Available from: https://portals.iucn.org/library/sites/ library/files/resrecfiles/WCC_2008_RES_99_EN.pdf (last accessed: December 2019).

IUCN (2012) Res. 4.038: Recognition and conservation of sacred natural sites in protected areas. Available from: https://portals.iucn. org/library/sites/library/files/resrecfiles/WCC_2008_RES_38_EN.pdf (Accessed December 2019)

IUCN (2014). The Promise of Sydney: Vision. Gland, Switzerland: *IUCN*. Available from: https://www.iucn.org/theme/protected-areas/ about/promise-sydney (Accessed August 2018).

IUCN (2015). World Heritage at the IUCN world Parks Congress: The promise of Sydney. Gland, Switzerland: IUCN. Available from: https://whc.unesco.org/en/activities/871/ (Accessed August 2018).

IUCN (2016a) Res 033: Recognising cultural and spiritual significance of nature in protected and conserved areas. Available from: https://portals.iucn.org/library/sites/library/files/resrecfiles/ WCC 2016 RES 033 EN.pdf (Accessed December 2019).

IUCN (2016b). Mālama Honua-Statement of Commitments from the Nature-Culture Journey. Available from: https://www.iucn.org/files/ m%C4%81lama-honua-%E2%80%93-statement-commitmentsnature-culture-journey (Accessed January 2018).

IUCN WCPA (2017). IUCN Green List of Protected and Conserved Areas: Standard, Version 1.0; The global standard for protected areas in the 21st Century. Gland, Switzerland: IUCN. https://www. iucn.org/theme/protected-areas/our-work/iucn-green-list-protectedand-conserved-areas (Accessed January 2018).

IUCN WCPA Task Force on OECMs, (2019). https://portals.iucn. org/library/sites/library/files/documents/PATRS-003-En.pdf Gland, Switzerland: IUCN.

Jepson, P., and Canney, S. (2003). 'Values-led conservation'. Global Ecology and Biogeography, 12(4): 271-274. https://doi.org/10.1046/ j.1466-822X.2003.00019.x

Jonas H.D., Barbuto V. Jonas H.C. Kothari A., and Nelson F. (2014). 'New Steps of Change: Looking Beyond Protected Areas to Consider Other Effective Area-Based Conservation Measures'. Parks: The International Journal on Protected Areas and Conservation 20(2): 111-128. https://doi.org/10.2305/IUCN.CH.2014. PARKS-20-2.HDJ.en

Jupiter, S.D. (2017). 'Culture, kastom and conservation in Melanesia: What happens when worldviews collide?' Pacific Conservation Biology 23(2): 139-145. https://doi.org/10.1071/PC16031

Hviding, E. (1998). 'Contextual flexibility: present status and future of customary marine tenure in Solomon Islands'. Ocean & Coastal Management 40(964): 253-269. https://doi.org/10.1016/S0964-5691(98)00042-8

Land Use Consultants (2007) Developing an Intrusion Map of England, Land Use Consultants London. Available from: https:// www.cpre.org.uk/wp-content/uploads/2019/11/developing an intrusion map of england 1.pdf (Accessed Feb 2020).

Lee, E. (2016). 'Protected areas, country and value: the natureculture tyranny of the IUCN's protected area guidelines for Indigenous Australians'. Antipode vol. 48, no. 2, pp. 355-374. https://doi.org/10.1111/anti.12180

Lee, E. and Hamilton, F. (2016). 'Tasmania - after a long journey, world heritage area delivers indigenous rights'. The ICCA Consortium newsletter 12: 19-21.

Leitão, L., Bourdin, G., Badman, T., and Wigboldus, L. (2017). Connecting Practice Phase II: Final Project Report. Gland, Switzerland: ICOMOS/IUCN.

Leitão, L., Leanna W, Bourdin G., Badman, T., Tolnay, Z., and Mthimkhulu, O. (2019).'Connecting Practice: Defining new methods and strategies to further integrate natural and cultural heritage under the World Heritage Convention'. In: B. Verschuuren & Brown. S. (eds.) Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy, pp. 151-163. Abingdon and New York: Routledge. https://doi. org/10.4324/9781315108186-10

Mallarach, J.-M., & Papayannis, T. (2006). Protected Areas and Spirituality: Proceedings of the First Workshop of The Delos Initiative. IUCN and Montserrat, Spain: Publicacions de l'Abadia de Montserrat.

Mallarach, J.M. and Catanoiu, S. (2010). 'Rila Monastery Natura Park., Bulgaria'. in J.M Mallarach & T. Papaynnis (eds.) *The Sacred Dimension of Protected Areas. Proceedings of the Second Workshop of The Delos Initiative, Ouranoupolis 2007*, pp. 173–176. Athens: IUCN & Med-INA.

Mallarach, J.M., ed. (2012). Spiritual Values of Protected Areas of Europe. Vilm and Bonn: German Federal Agency for Nature Conservation.

Mallarach, J. M., Comas, E., and de Armas, A. (2012). *El patrimonio inmaterial: valores culturales y espirituales. Manual para su incorporación en áreas protegidas, Manual 10.* Madrid: Serie de Manuales de EUROPARC-España.

Mallarach, J.M., Corcó, J., and Papayannis T. (2016). 'Christian Monastic Lands as Protected Landscapes and Community Conserved Areas: An overview'. *Parks, the International Journal on Protected Areas and Conservation* 21(1): 63–78. https://doi.org/10.2305/IUCN.CH.2016.PARKS-22-1JMM.en

Mallarach, J.M., Múgica, M., de Armas, A., and Comas, E. (2019). 'Developing Guidelines for Integrating Cultural and Spiritual Values into the Protected Areas of Spain'. In: E. Verschuuren B. & S. Brown (eds.) *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy*, pp. 194–207. Abingdon and New York: Routledge. https://doi.org/10.4324/9781315108186-13

Mallarach J.M., Tuladhar-Douglas W., Liljeblad J., F., Borde R., Bernbaum E., and Verschuuren B. (2019). 'The Diversity of Concepts and Values of Nature in the Governance and Management of Protected and Conserved Areas'. In: B. Verschuuren & S. Brown S. (eds.) Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy, pp. 21–39. Abingdon and New York: Routledge. https://doi.org/10.4324/9781315108186-2

Masereka, A.J. (1996). The role of traditional knowledge in the conservation of the Rwenzori Mountains in The Rwenzori Mountains National Park. Kamapala: Makerere University.

McCarter, J., Sterling, E. J., Jupiter S. D., Cullman, G. D., Albert, S., Basi, M., Betley, E., Boseto, D., Bulehite, E. S., Harron, R., Holland, P. S., Horning, N., Hughes, A., Jino, N., Malone, C., Mauli, S., Pae, B., Papae, R., Rence, F., Revo, O., Taqala, E., Taqu, M., Woltz, H., and Filardi, C. E. (2018). 'Biocultural approaches to developing well-being indicators in Solomon Islands'. *Ecology and Society* 23(1). https://doi.org/10.5751/ES-09867-230132

MEA (2003). Ecosystems and Human Wellbeing: A Framework for Assessment, Millennium Ecosystem Assessment. New York: Island Press.

Mayr, J., Sánchez, H., Apreza, P., Castilla, M., Suaza, M. C., Rodríguez, G. E., and Ayala, C. A. (1997). *Plan de desarrollo sostenible de la Sierra nevada de Santa Marta*. Santa Marta: Fundación Pro-Sierra Nevada de Santa Marta.

Murray, G. and Burrows, D. (2017). 'Understanding Power in Indigenous Protected Areas: the Case of the Tla-o-qui-aht Tribal Parks'. *Human Ecology* 45(6): 763-772. https://doi.org/10.1007/s10745-017-9948-8

Neugarten, R.A., Langhammer, P.F., Osipova, E., Bagstad, K.J., Bhagabati, N., Butchart, S.H.M., Dudley, N., Elliott, V., Gerber, L.R., Gutierrez Arrellano, C., Ivanić, K.-Z., Kettunen, M., Mandle, L., Merriman, J.C., Mulligan, M., Peh, K.S.-H., Raudsepp-Hearne, C., Semmens, D.J., Stolton, S., and Willcock, S. (2018). *Tools for measuring, modelling, and valuing ecosystem services: Guidance for Key Biodiversity Areas, natural World Heritage Sites, and protected areas.* Gland, Switzerland: IUCN. Available from: https://doi.org/10.2305/IUCN.CH.2018.PAG.28.en (Accessed: September 2018)

Pandey, A., Kotru, R., and Pradhan, N. (2016). 'Kailash Sacred Landscape: Bridging Cultural Heritage, Conservation and Development through a Trans-boundary Landscape Approach'. In: B. Verschuuren & N. Furuta, N. (eds.) *Asian Sacred Natural Sites, Philosophy and Practice in Protected Areas and Conservation*, pp. 145–158. London: Routledge.

Papayannis, T., & Mallarach, J. (2009). The Sacred Dimension of Protected Areas. Gland and Athens: IUCN & Med-Ina, p. 262.

Pascual, U., Balvanera, P., Díaz, S., Pataki, G., Roth, E., Stenseke, M., Watson, R.T., Dessane, E.B., Islar, M., Kelemen, E. and Maris, V. (2017). 'Valuing nature's contributions to people: the IPBES approach'. *Current Opinion in Environmental Sustainability*, 26, pp. 7–16.

Pearson, K.R., Backman, M., Grenni, S., Moriggi, A., Pisters, S., and Vrieze de, A. (2018). *Arts-Based Methods for Transformative Engagement: A Toolkit*. Wageningen: SUSPLACE. https://doi.org/10.18174/441523

Posey D. (1999). Cultural and Spiritual Values of Biodiversity: A Complementary Contribution to the Global Biodiversity Assessment. London: Intermediate Technology Publications. https://doi.org/10.3362/9781780445434

Posey, D. and G. Dutfield (1996). Beyond Intellectual Property Rights: Towards Traditional Resource Rights for Indigenous Peoples and Local Communities. Ottawa: IDRC. Available from: https://www.idrc.ca/en/book/beyond-intellectual-property-toward-traditional-resource-rights-indigenous-peoples-and-local (Accessed July 2019).

Ramsar (2016). Rapid Cultural inventories for Wetlands. Gland, Switzerland: Ramsar Culture Network. Available from: https://www.ramsar.org/sites/default/files/documents/library/guidance-rapid-cultural inventories for wetlands.pdf (Accessed June 2016).

Renkumsbeekdal (2018). Information Centre Renkums Beekdal. Available at: www.renkumsbeekdal.nl (Accessed February 2018).

Rowcroft, R. Studley, J., and Ward, K. (2006). 'Eliciting Forest Values and "cultural loss" for Community Plantations and Nature Conservation'. Forest, Trees and Livelihoods 16 (4): 329-358. https:// doi.org/10.1080/14728028.2006.9752572a

Sanó, L. (2017). A Valorização do conhecimento das mulheres sobre a gesta o tradicional das conchas no Arquipelago dos Bijagos. Area Marinha Protegida Comunitaria das Ilhas Urok Formosa, Nago e Chedia. Available from: https://www.ramsar.org/sites/default/files/ relatorio conchas urok paginacao 020218 ma 0.pdf (Accessed July 2019).

Sarmiento, F., Bernbaum, E., Brown, J., Lennon, J. and Feary, S. (2014). 'Managing cultural features and uses'. In G. L. Worboys, M. Lockwood, A. Kothari, S. Feary and I. Pulsford (eds.). Protected Area Governance and Management, pp. 685-714. Canberra: ANU Press.

Save the Jordan (2013). Covenant for the Jordan River. Available from: https://elijah-interfaith.org/pdf/JR Covenant.pdf (Accessed March 2018).

SBB (2018). Staats Bosbeheer; Renkums Beekdal Bezoekerscentrum. Available at: https://www.staatsbosbeheer.nl/ natuurgebieden/veluwe/bezienswaardigheden/informatiecentrumrenkums-beekdal (Accessed February 2018).

SCBD (2004). Akwé: Kon Guidelines. Voluntary guidelines for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities. Montreal: Secretariat of the Convention on Biological Diversity.

SCBD (2011). Tkarihwaié:ri Code of Ethical Conduct to Ensure Respect for the Cultural and Intellectual Heritage of Indigenous and Local Communities Relevant to the Conservation and Sustainable Use of Biological Diversity. Montreal: Secretariat of the Convention on Biological Diversity.

Schwartz, R. (1994). Circle of Protest: Political Ritual in the Tibetan Uprising. London: Hurst & Co.

Sipiriano N. (2012). Pacific Intangible Cultural Heritage Mapping Toolkit. Suva: Secretariat of the Pacific Community.

Shen, X., Li, S., Wang, D., and Lu, Z. (2015). 'Viable Contribution of Tibetan Sacred Mountains in Southwestern China to Forest Conservation.' Conservation Biology 29(6):1518-1526. https://doi. org/10.1111/cobi.12587

SNSI (2018a). Sacred Valley, conservation management and indigenous survival, Altai Republic, Russia. Available at: https:// tinyurl.com/y97jzlev (Accessed March 2017).

SNSI (2018b). Sacred Natural Sites Initiative Case Study: Conservation and Tourism Development in the Ovcar -Kablar Gorge, Serbian Holy Mountain. Available from: https:// sacrednaturalsites.org/items/ovcar-kablargorge/ (Accessed February 2018).

SNSI (2018c). Sacred Natural Sites Initiative Case Study: Opportunity for Collaboration at the Worlds' third-eye-lake Isiik-Kul, Kyrgyzstan. Available at: https://tinyurl.com/yaboeflo (Accessed February 2018)

SNSI (2018d). Sacred Natural Sites Initiative Case Study: Nyldy Ata Gorge complex of sacred sites, Kyrgyzstan. Available at: https:// tinyurl.com/yaw9k4cw (Accessed February 2018)

Sponsel, L.E. (2012). Spiritual ecology: A quiet revolution. Oxford: ABC-CLIO.

Spoon, J. and Arnold, R. (2012). 'Collaborative Research and Co-Learning: Integrating Nuwuvi (Southern Paiute) Ecological Knowledge and Spirituality to Revitalize a Fragmented Land'. Journal for the Study of Religion, Nature and Culture 6: 477–500. https://doi.org/10.1558/jsrnc.v6i4.477

Spoon, J. (2014). 'Quantitative, Qualitative and Collaborative Methods: Approaching Indigenous Ecological Knowledge Heterogeneity'. Ecology and Society, 19(3). https://doi.org/10.5751/ ES-06549-190333

Sterling, E.J., Filardi, C., Toomey, A., Sigouin, A., Betley, E., Gazit, N., Newell, J., Albert, S., Alvira, D., Bergamini, N. and Blair, M., (2017). 'Biocultural approaches to well-being and sustainability indicators across scales'. Nature ecology & evolution 1(12):1798. https://doi. org/10.1038/s41559-017-0349-6

Stolton, S., Dudley, N., Avcıoğlu Çokçalışkan, B., Hunter, D., Ivanić, K.-Z., Kanga, E., Kettunen, M., Kumagai, Y., Maxted, N., Senior, J., Wong, M., Keenleyside, K., Mulrooney, D., and Waithaka, J. (2015). 'Values and benefits of protected areas'. In: G.L. Worboys, M. Lockwood, A. Kothari, S. Feary, and I. Pulsford (eds.), Protected Area Governance and Management, pp. 145-168. Canberra: Australian National University Press.

Studley, J. (2014). Gzhi bdag: custodians of the Tibetan Spiritscape: a bio-cultural audit of Sacred Natural Sites in NW Yunnan (with special reference to the Yubeng Valley). Hong Kong: CERS.

Studley J. and Horsley, P. (2019). 'Spiritual Governance as an indigenous behavioural practice with implications for protected and conserved areas'. In: B. Verschuuren B. & S. Brown (eds.) Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy, pp. 72-84. Abingdon and New York: Routledge. https://doi.org/10.4324/9781315108186-5

Studley J, and Bleisch, W. (2018). 'Juristic Personhood for Sacred Natural Sites; a potential means for protecting nature'. In: Parks, the International Journal on Protected Areas and Conservation 24(1):81-96. https://doi.org/10.2305/IUCN.CH.2018.PARKS-24-1JS.en

Studley, J. (2019). *Indigenous Sacred Natural Sites and Spiritual Governance: The Legal Case for Juristic Personhood.* Abingdon: Routledge. https://doi.org/10.4324/9780429455797

TAD (2019). *The Ashden Directory.* Available from: http://www.ashdendirectory.org.uk/ (Accessed July 2019).

tebrakunna country, Lee, E., and Tran, T. (2016). 'From board room to kitchen table: shifting the power seat of indigenous governance in protected area management'. *Australian Aboriginal Studies* 2:81–93.

The Indigenous Circle of Experts (2018). We Rise Together: Achieving Pathway to Canada Target 1 through the creation of Indigenous Protected and Conserved Areas in the spirit and practice of reconciliation. Her Majesty the Queen in Right of Canada. Available from: https://tinyurl.com/y7tkz75y (Accessed March 2018).

UNESCO (1972). Convention Concerning the Protection of the World Cultural and Natural Heritage. Paris: UNESCO. Available from: https://whc.unesco.org/en/conventiontext/ (Accessed November 2017).

UNESCO (2002). Universal Declaration on Cultural Diversity: A vision, a conceptual platform, a pool of ideas for implementation a new paradigm, Cultural Diversity Series no. 1. Paris: UNESCO. Available from: http://www.unesco.org/new/en/culture/themes/cultural-diversity/reflections-on-cultural-diversity/ (Accessed November 2017).

UNESCO (2003a). Text of the Convention for the Safeguarding of the Intangible Cultural Heritage. Available from: https://ich.unesco.org/en/convention (Accessed March 2018).

UNESCO (2003b). Sacred Sites and Pilgrimage Routes in the Kii Mountain Range. Agency for Cultural Affairs and Ministry of the Environment Government of Japan.

UNDRIP (2007). *United Nations Declaration on the Rights of Indigenous Peoples. United Nations (March)*. Available from: https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html (Accessed July 2019).

UNESCO (2011a). Recommendation on the Historic Urban Landscape. Paris: UNESCO. Available from: https://whc.unesco.org/uploads/activities/documents/activity-638-98.pdf (Accessed March 2018).

UNESCO (2011b). *Preparing World Heritage Nominations* (Second edition, 2011). Paris: UNESCO. Available from: https://whc.unesco.org/en/preparing-world-heritage-nominations/ (Accessed March 2018).

UNESCO (2017). The Operational Guidelines for the Implementation of the World Heritage Convention. Available from: https://whc.unesco.org/en/guidelines/ (Accessed April 2018).

Verschuuren, B., Wild, R., McNeely, J., and Oviedo, G. (2010). Sacred Natural Sites: Conserving Nature and Culture. London: Farth Scan.

Verschuuren, B. (2016). 'Re-awakening the power of place, Ancient philosophy and practice with relevance for protected areas and conservation in Asia'. In: B. Verschuuren and N. Furuta (eds.) Asian Sacred Natural Sites: Philosophy and Practice in protected Areas and Conservation, pp. 1–14. London: Routledge. https://doi.org/10.4324/9781315676272

Verschuuren, B., and Brown, S. eds. (2019). *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy.* Abingdon & New York: Routledge. https://doi.org/10.4324/9781315108186

Walter, R. K. and Hamilton, R. J. (2014). 'A cultural landscape approach to community-based conservation in Solomon'. *Ecology and Society* 19(4):41. https://doi.org/10.5751/ES-06646-190441

West, P. (2005). 'Translation, Value, and Space: Theorizing an Ethnographic and Engaged Environmental Anthropology'. American Anthropologist 107(4):632 – 642. https://doi.org/10.1525/aa.2005.107.4.632

Wild, R. and Mcleod, C. (2008). Sacred Natural Sites Guidelines for Protected Area Managers. Gland, Switzerland: IUCN. https://doi.org/10.2305/IUCN.CH.2008.PAG.16.en

Worboys, G. L. and Pulsford, I. (2011). Connectivity conservation in Australian landscapes. Report prepared for the Australian Government Department of Sustainability, Environment, Water, Population and Communities on behalf of the State of the Environment, Canberra.

Yatra aur Tammanah (2017). Yatra: our purposeful Journey and Tammanah: our wishful aspirations for our heritage. Learnings & Commitments from the CultureNature Journey. 19th ICOMOS General Assembly, Delhi. Available from: https://www.icomos.org/images/DOCUMENTS/General Assemblies/19th Delhi 2017/19th GA Outcomes/ICOMOS GA2017 CNJ YatraStatement final EN 20180207circ.pdf (Accessed March 2018).

Yu-Fai L., Spenceley, A., Hvenegaard, G., Buckley, R. (eds.) (2018). *Tourism and visitor management in protected areas: Guidelines for sustainability.* Best Practice Protected Area Guidelines Series, no. 27, Gland, Switzerland: IUCN, p. 120. https://doi.org/10.2305/IUCN.CH.2018.PAG.27.en

Zylstra M. J. (2019). 'Meaningful Nature Experiences: Pathways for deepening connections between people and place'. In: B. Verschuuren and S. Brown S. (eds.) *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy.* Abingdon and New York: Routledge. https://doi.org/10.4324/9781315108186

Glossary

Animism: Animism is predicated on the assumption that sentient beings such as spirits exist not only in humans but also in animals, plants, rocks, and natural phenomena, such as thunder, geographic features, such as mountains or rivers, and other entities of the natural environment. Animism is a common feature in the belief systems of the world's indigenous peoples (Bernard, 2006; Sponsel, 2012).

Attributes: As constructed ideas, values are not tangible. An object or place conveys its values through certain attributes. Attributes can be physical elements, relationships between physical elements, essence, meaning, and at times related processes, that need to be protected and managed in order to sustain the values of the place (ICOMOS et al., 2010: 6).

Community Conserved Area: see ICCA

Conflict of interest: A situation that has the potential to undermine the impartiality of a person, organisation, agency, etc. because of the possibility of a clash between their selfinterest and public, general or professional interest (IUCN & WCPA, 2016).

Consensus: General agreement, characterised by the absence of sustained opposition by any party and by a process that seeks to take into account the views of all parties concerned and to reconcile any conflicting arguments. Consensus need not imply unison (IUCN & WCPA, 2016).

Consent and FPIC: Free, prior, and informed consent of affected indigenous peoples and local communities is a requirement of ILO Convention 169 and the Convention on Biological Diversity 8(j) (IUCN & WCPA, 2016). It is a specific right of indigenous peoples and is recognised in the UNDRIP (2007), (FAO 2016).

Conserved Area: CBD Parties and other organisations are increasingly referring to 'protected and conserved areas' (see for example CBD decision 14/8 and the IUCN Green List of Protected and Conserved Areas). In this context, 'conserved areas' include areas that may satisfy the criteria for 'other effective area-based conservation measures'.

Culture: Culture is a set of distinctive spiritual, material, intellectual and emotional features of society or a social group. It encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs (Wild & McLeod, 2008).

Cultural appropriation: Recognise issues related to appropriating cultural significance – avoiding interpreting (often simplistically) or re-interpreting (describing it as something different to) the cultural significances of nature of one people

in the terms, language and values of another. This is of particular concern when PA managers describe the practices or values of communities in terms of conservation that may become attempts to both appropriate and co-opt them.

Cultural diversity: The UNESCO Universal Declaration on Cultural Diversity (2001) states in Art. 1 that: "Culture takes diverse forms across time and space". This diversity is embodied in the uniqueness and plurality of the identities of the groups and societies making up humankind (UNESCO 2002).

Cultural heritage: According to UNESCO (1972), "Cultural heritage is the legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations."

Cultural and spiritual significance of nature: (see also significance) It is defined as the inspirational, spiritual, cultural, aesthetic, historic and social meanings, knowledge, values, feelings, ideas and associations that natural features and nature in general reveal to and inspire in people – both individuals and groups. These attributes of nature range from species of flora and fauna to natural features to entire landscapes and waterscapes. They can encompass diverse manifestations such as night skies, monumental features, intimate local sites, as well as the practices, knowledge, human relationships and institutions associated with them (for a broader discussion on this, see Verschuuren & Brown, 2019).

Cultural landscapes: They can be defined as those areas which clearly represent or reflect the patterns of settlement or use of the landscape over a long time, as well as the evolution of cultural values, norms and attitudes toward the land.

Custodians: Individuals or groups of people, usually within traditional institutions, who have the responsibility to take care of a specific sacred natural site or sites. Custodians may reside either close to or at considerable distance from the sacred natural sites to which they are linked through history, culture, self-identification and spiritual practice (Wild & McLeod, 2008).

Governance: See Info pages.

Indicator: A quantitative or qualitative variable that can be measured or described and provides a means for judging the protected or conserved areas compliance with the requirements of a particular criterion or set of criterions. Adequate indicators allow to assess the quality of management and governance in relation to cultural and spiritual values of nature. (Indicators based on: IUCN & WCPA, 2016).

Indigenous and Community Conserved Area (ICCA): or Indigenous Peoples' and Community Conserved Territories and Areas, are spaces de facto governed by indigenous peoples or local communities with evidently positive outcomes for the conservation of biological and cultural diversity. In ICCAs, the continuation, revival or modification of traditional practices (some of which are of ancient origin) and/or new succeed in protecting and restoring natural resources and cultural values in the face of new threats or opportunities. ICCAs may or may not fit the IUCN definition

of 'protected area' (ICCA Consortium, 2018).

Indigenous peoples: According to the ILO Convention 169 on Indigenous and Tribal Peoples in Independent Countries, it includes: a) peoples who identify themselves as 'indigenous'; b) tribal peoples whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations; c) traditional peoples not necessarily called 'indigenous' or 'tribal' but who share the same characteristics of social, cultural, and economic conditions that distinguish them from other sections of the national community, whose status is regulated wholly or partially by their own customs or traditions, and whose livelihoods are closely connected to ecosystems and their goods and services (see IUCN's Environmental and Social Management System - Standard on indigenous peoples. https://www.iucn.org/about/values/ and (IUCN & WCPA, 2016).

Intangible cultural heritage: Intangible heritage means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognise as part of their cultural heritage (UNESCO 2003a).

Intrinsic values: Qualitative values that are not optional or oriented toward human use and often provide reasons for conservation (IUCN & WCPA, 2016).

Knowledge system: refers to a multiplicity of communities of knowledge. From this perspective indigenous and modern communities embody different systems of knowledge, different ways of understanding, perceiving, experiencing, and relationship to the social milieu and natural environment (Marglin 2007).

Management: Refers to what is done in pursuit of given objectives, that is the means and actions to achieve such objectives in protected or conserved areas (Borrini Feyerabend et al., 2013, p. 11).

Modern, modernity: A series of developments in which, beginning in 17th-century Europe, scientific discoveries provide a platform for an industrial revolution that rapidly increased the economic base of the West and allowed it to extend its influence globally (Verschuuren et al., 2010).

OECM or 'other effective area-based conservation measure,' is defined as "A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in situ* conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values (CBD, 2018)." (IUCN WCPA Task Force on OECMs, 2019).

Place attachment: Place attachment refers to the emotional connection formed by an individual to a physical location due to the meaning given to the site as a function of its role as a setting for experience. A range of thoughts, beliefs, attitudes and behaviour as well as feelings are evoked through attachment to place. Thus, place attachment involves an elaborate interplay of emotion, cognition, and behaviour in reference to place (Studley, 2019).

Protected Area: IUCN defines a Protected Area as a "clearly defined geographical space, recognised, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." There are six IUCN management categories for protected areas (Dudley, 2008).

Religions, world's religions: Institutionalised religions practised by large sectors of humankind, each one including different branches and views of nature. Around 85% of humankind adhere to one of five of the world's largest religions; Christianity, Islam, Hinduism, Buddhism, and the complex of Chinese religions such as Daoism, Confucianism and Buddhism. Other world religions are Judaism, Sikhism and Zoroastrianism (O'Brien & Palmer, 2007).

Right-holder: Actor that is socially endowed with legal or customary rights with respect to land, water and natural resources (IUCN & WCPA, 2016).

Significance: In heritage conservation, significance means the importance of a site as determined by the aggregate of values attributed to it. The values considered in this process should include those held by experts – art historians, archaeologists, architects, anthropologists, conservationists, biologists, ecologists and others – as well as other values brought forth by new stakeholders or constituents, such as social and economic values (De la Torre 2002).

Sacred Natural Site: A sacred natural site is a natural feature or a large area of land or water having special spiritual significance to peoples and communities. Sacred natural sites consist of all types of natural features including mountains, hills, streams, seeps, reefs, forests, groves, trees, rivers, lakes, lagoons, caves, islands and springs (Adapted from Wild & Mcleod, 2008).

Spiritual governance: Spiritual governance applies to particular natural areas or landscapes that are imbued with sacredness or religious value. In such areas the governance actors are what one identifies as a divine power or spirit;

a deity, at times assisted by the shaman and ritual custodians while in religious landscapes the governance actors are the representatives of mainstream faith groups (Verschuuren, 2016).

Stakeholder: Individual, group or organisation who possesses direct or indirect interests and concerns about the site, but does not necessarily enjoy legal or customary entitlements. Examples for stakeholders are local communities or conservation organisations (IUCN & WCPA, 2016).

The Public: also referred to as 'general public,' is made up of members of the wider society – including people with religious backgrounds, indigenous peoples as well as secular people – and organisations that represent particular sections of society that are able to influence or mitigate societal, corporate and governmental threats to the cultural and natural heritage of protected areas.

Values: The notion of value is one of the fundamental ideas in heritage conservation and in this context values refer to the qualities and characteristics assigned by people to an object, a feature or a place, be it a building, a landscape, a forest, or a mountain (de la Torre 2002, p. 7).

Spirituality: A wide range of definitions of spirituality exist ranging from personal beliefs in a supernatural realm to broader concepts such as a transcendent sacred meaning of life involving a sense of awe and reverence toward the universe. Rather than the material aspects of life, spirituality involves the mental aspects of life such as the purity of motives, affections, intentions, inner dispositions, the psychology of the inner life and the analysis of feelings.

Traditional knowledge: Traditional knowledge is knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity.

Worldview: A worldview is the fundamental cognitive orientation, affective, and evaluative presuppositions a group of people make about the nature of things, and which they use to order their lives (Hiebert, 2008). This includes ways of knowing natural philosophy; fundamental, existential, and normative positions, themes, values, emotions, and ethics. Worldviews are influenced by power and history, always in motion, and can overlap as knowledge is exchanged through local-global communication.

Acronyms

BfN German Federal Agency for Nature Conservation

BMU Conservation and Nuclear Safety

CSVPA IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas

ICCA Indigenous Peoples' and Community Conserved Territories and Areas

ICCROM International Centre for the Study of the Preservation and Restoration of Cultural Property

ICOMOS International Council on Monuments and Sites

IUCN International Union for Conservation of Nature

OECM Other Effective Conservation Means, see glossary

SNS Sacred Natural Site

TCF The Christensen Fund

TMI The Mountain Institute

UNESCO United Nations Educational, Scientific and Cultural Organisation

WCPA IUCN World Commission on Protected Areas

WPC World Parks Congress

Author biographies



Dr. Bas Verschuuren is a researcher and lecturer with the Forest and Nature Conservation Policy Group at Wageningen University, The Netherlands. As an anthropologist with a strong background in environmental sciences he combines specialist experience in conservation projects with applied, co-created conservation research. His research focuses on the ontological and political dimensions of nature conservation management and governance.

Bas is co-chair to the IUCN WCPA specialist group on Cultural and Spiritual Values of Protected Areas (www.csvpa.org) (with Ed Bernbaum) and co-founder of the Sacred Natural Sites Initiative (www.sacrednaturalsites.org) (with Robert Wild). Both organisations make the cultural, sacred and spiritual dimensions of nature more central to mainstream nature conservation.

While investigating the interlinkages of natural and cultural heritage, Bas participated in the IUCN ICOMOS Connecting Practice project, several Nature Culture Journeys and the development of two IUCN Best Practice Guidelines for protected areas. He is an editor with *Parks: The International Journal on Protected Areas and Conservation* and has published over 50 journal articles and book chapters. These include his first edited volume: *Sacred Natural Sites: Conserving Nature and Culture* (2010) and his fifth: *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management, and Policy* (2019; co-edited with Steve Brown).



Dr. Josep-Maria Mallarach holds a PhD. in biology, a MSc. in environmental sciences and a BA in geology. Based in the Catalonian Pyrenees, he works as a global conservation consultant specialised in protected and conserved areas planning, management, evaluation and impact assessment. Josep-Maria is a member of the IUCN World Commission of Protected Areas and the steering committee of its Specialist Group on Cultural and Spiritual Values of Protected Areas. He represents the IUCN World Heritage Programme in the UNESCO Initiative of World Heritage Sites of Religious Significance. As co-founder and coordinator of the Delos Initiative he co-edited four volumes of its proceedings on the sacred and spiritual dimensions of protected areas worldwide. He led the development of the Spanish Manual for Protected Area Managers on Intangible Heritage, Cultural and Spiritual Values. Josep-Maria directs the Silene Association for integrating cultural and spiritual values into nature conservation (www.silene.ong). As an educator, he leads a postgraduate course on spiritual values and meanings of nature at the University of Girona, and has published widely on the above topics.



Dr. Edwin Bernbaum, is co-chair of the IUCN Specialist Group on the Cultural and Spiritual Values of Protected Areas (with Bas Verschuuren). A scholar of comparative religion and mythology, his work focuses on the relationship between culture and the environment in protected areas, including World Heritage Sites. His book *Sacred Mountains of the World* won the Commonwealth Club's gold medal for best work of nonfiction and was the basis of an exhibit at the Smithsonian Institution. As Director of the Sacred Mountains Programme at The Mountain Institute, he initiated and implemented projects to develop interpretive materials with US National Parks such as Yosemite and Hawai'i Volcanoes based on the evocative cultural and spiritual associations of natural features in cultures around the world. He worked on a project at Badrinath, the major Hindu pilgrimage shrine in the Indian Himalayas, in which priests and scientists encouraged pilgrims to replant trees for reasons that come out of their own religious and cultural traditions. He also consulted on a project to nominate Mount Kailas in Tibet, the most sacred mountain in the world for over a billion people, and the pilgrimage routes leading to it from Nepal and India as a transboundary UNESCO World Heritage Site.



Dr. Jeremy Spoon is an Associate Professor of Anthropology at Portland State University. Since 1997, he has conducted applied research and facilitated various projects focused on the relationships between indigenous and local peoples and protected areas in the western United States, Nepal, Hawai'i and Kenya. Jeremy also spent 20 years at The Mountain Institute during this time. His work utilises collaborative and participatory approaches to facilitate the integration of indigenous and local wisdom, knowledge and practice into protected area governance, management and interpretation. He has collaborated in the U.S. with more than 20 Native American Nations and several federal agencies and non-profits. In Nepal, his partners include local committees, government agencies, protected area managers and the aid community. He received his Ph.D. in Cultural Anthropology from the University of Hawai'i at Manoa. Jeremy is an Honorary Member of the IUCN's Indigenous and Community Conserved Area Consortium and has authored and co-authored contributions for various IUCN publications and academic articles related to indigenous knowledge and place-based spiritually in and around mountainous protected and conserved areas.



Dr. Steve Brown is an Honorary Associate with the Museum and Heritage Studies Programme at the University of Sydney, Australia. He is an archaeologist who works across the fields of indigenous, historic, and contemporary archaeology and has extensive experience in protected area management in Australia. Steve is a member of the IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas (CSVPA) and on Protected Landscapes/Seascapes. He is a member of ICOMOS and the immediate past-president of the ICOMOS/IFLA International Scientific Committee on Cultural Landscapes (2014-2017). Steve is a co-chair (with Ona Vileikis) of the ICOMOS 2020 and 2023 International Scientific

Steve has specialist knowledge of and experience in the application of cultural landscapes at World Heritage, national, and local levels - with particular reference to protected areas and the integration of natural-cultural values. He has an extensive publication record, including Cultural landscapes: a practical guide for park management (2010), Cultural and spiritual significance of nature in protected areas: governance, management, and policy (2019; co-edited with Bas Verschuuren), a volume of International Journal on Heritage Studies on '(in)significance' (2020; co-edited with Tracy Ireland and John Schofield); and a forthcoming Routledge handbook on cultural landscapes (2021; co-edited with Cari Goetcheus).



Dr. Radhika Borde is a researcher at the Department of Social Geography and Regional Development at the Charles University in Prague. She is currently participating in a project investigating sanitation and waste management in India funded by the Czech Science Foundation. She has designed and lectured courses for undergraduates and postgraduates at the Charles University in Prague. Radhika holds a PhD in the social sciences from Wageningen University in the Netherlands. She has published peer-reviewed academic articles and book chapters on social movements against mining, indigenous culture and religiosity, sacred natural sites in India, activist media, Adivasi women's movements, and the Anthropocene. Radhika is a steering committee member of the IUCN WCPA Specialist Group on Cultural and Spiritual Values of Protected Areas. She is also a published poet and author of short fiction, as well as the founder of a social enterprise in India.



Jessica Brown is Executive Director of the New England Biolabs Foundation, a private, U.S.-based foundation, whose mission is to foster stewardship of landscapes and seascapes and the biocultural diversity found in these places. She has three decades of experience with community-based conservation globally, having worked in countries of Africa, Asia, the Caribbean, Mesoamerica, Andean South America, Central Europe and the Balkans. Jessica chairs the Protected Landscapes Specialist Group of IUCN's World Commission on Protected Areas, and is a member of the ICOMOS/IFLA International Scientific Committee on Cultural Landscapes. She serves on the governing and/or advisory boards of NGOs including: International Funders for Indigenous peoples, New England International Donors, Terralingua, and the Sacred Natural Sites Initiative. Jessica has published widely on topics related to protected areas governance, community engagement, and stewardship of biocultural landscapes. Recently she has collaborated with the UNDP/GEF Small Grants Programme and the UNESCO World Heritage Centre on a project to advance community engagement in World Heritage, and has served as guest faculty for a series of capacity-building workshops at Tsukuba University on nature-culture linkages in conservation. She is an associate member of the Graduate Faculty of Rutgers University in its Cultural Heritage and Preservation Studies programme, and holds degrees from Clark University and Brown University.



Dr. Mark Calamia has worked in the field of Anthropology, Archaeology, and Cultural Resource Management for over 35 years. He is currently employed by the U.S. National Park Service (NPS) as a Cultural Resources Programme Manager (CRPM) and Tribal Liaison at the Chamizal National Memorial in El Paso, Texas. From December 2011 to April 2016 Mark served as a CRPM and Tribal Liaison at Pipestone National Monument in southwestern Minnesota. Overall, he has worked for over 16 years with 43 federally-recognised American Indian Tribes in the U.S. Southwest and U.S. Midwest. Over the last 16 years Mark has focused on ethnographic and ethnohistoric studies concerning resource management and conservation. He has been involved in the assessment of indigenous cultural landscapes, Traditional Cultural Properties, and historic and sacred sites. His current interests include rock art research and history along the U.S.–Mexican border.

Prior to working as an applied cultural anthropologist for the federal government, he worked as a consultant with NGOs conducting community-based marine conservation work in the southern Fiji Islands. Mark has published on the integration of traditional ecological knowledge with GIS technology. He earned a Ph.D. in Anthropology from the University of Colorado at Boulder in 2003.



Dr. Nora Mitchell, is Adjunct Associate Professor at the University of Vermont in Historic Preservation and is involved in international landscape conservation focussing on the interlinkages of culture-nature and cultural landscapes on the World Heritage List. She is a member of the ICOMOS/IFLA International Scientific Committee on Cultural Landscapes and the IUCN's World Commission on Protected Areas, and serves on the Coordinating Committee of the Network for Landscape Conservation in the U.S. During her 32-year career with the U.S. National Park Service, Nora worked on landscape conservation with many national parks and national heritage areas across the U.S. She was the founding director of the Stewardship Institute established to enhance leadership and innovation in the field of collaborative conservation. Nora has published widely in the landscape conservation field and is co-editor of Conserving Cultural Landscapes: Challenges and New Directions and co-author of World Heritage Papers 26: A Handbook for Conservation and Management of World Heritage Cultural Landscapes, The Protected Landscape Approach: Linking Nature, Culture, and Community, and A Thinking Person's Guide to America's National Parks.



Dr. Mark Infield, after graduating with a degree in Zoology in 1980, took off for Africa. Since then he has worked for NGOs, governments and universities to develop his interest in the relationships between protected areas and the communities who effect or are affected by them. His focus has been on developing practical initiatives that strengthen conservation outcomes. Completing an MSc. and a PhD. along the way, Mark has supported conservation managers and communities to interact positively. He spent ten years assisting the Uganda Wildlife Authority to establish their Community Conservation Department with the African Wildlife Foundation and in 2002, joined Fauna & Flora International's Asia Pacific programme. He returned to the UK to develop their Cultural Values and Conservation Programme, an extension of his commitment to improving conservation delivery through meaningful engagement with communities. Following a further stint in Uganda as an independent consultant supporting cultural engagement in conservation and advising the Ministry of Water and Environment, Mark returned to England where he now works for The Conservators of Ashdown Forest.



Dr. Emma Lee is a trawlwulwuy woman from tebrakunna country, Tasmania, Australia. She is an Aboriginal and Torres Strait Islander Research Fellow at the Centre for Social Impact, Swinburne University of Technology. Her research fields over the last 25 years have focused on indigenous affairs, land and sea management, policy and governance of Australian regulatory environments. Dr Lee has published in diverse journals ranging from Biological Reviews to Annals of Tourism Research. She is the 2018 recipient of the University of Tasmania's Foundation Graduate Award and one of Swinburne's 2019 Research Impact Award alumni. Dr Lee has previously won prestigious fellowships to study in Europe and Asia and is a key architect of the Tasmanian Government's 2016 Reset the Relationship strategy, a whole-of-government initiative to make sweeping reforms for Aboriginal Tasmanian rights. Her work has assisted in the first joint management plan of a protected area in Tasmania, constitutional recognition and establishing a market for indigenous cultural fisheries and food tourism through rights to access marine resources.





WORLD HEADQUARTERS Rue Mauverney 28 1196 Gland, Switzerland Tel: +41 22 999 0000 Fax: +41 22 999 0002 www.iucn.org