

POLITICS, PRACTICE, AND THE MANAGEMENT OF LIVING LANDSCAPES BRENDA BARRETT & ELEANOR MAHONEY, GUEST EDITORS

Integrating natural and cultural approaches in heritage conservation: A Practice Note

Heritage Octopus Collective

1. WHY THIS PRACTICE NOTE?

Are you seeking ways to better integrate natural and cultural heritage in your work, but are unsure how to make a start? Or, have you encountered situations where a lack of integrated thinking has created problems? If so, this Practice Note is for you!

Commonly used Western scientific approaches to heritage practices tend to divide culture and nature (or human from the non-human) as well as separating the sciences from the humanities. However, many other worldviews present different categorizations. There are customary and institutional systems that do not divide nature and culture, aligning with the worldviews and management practices of many Indigenous Peoples and local communities across the globe. However, even where the inter-connections are easily recognizable, there are often institutional arrangements that differentiate between natural and cultural heritage in national and international heritage systems (see Part 2, below).

Based on experiences from different parts of the world where people are looking for new approaches, we bring together some ideas that may assist in your thinking, practice, and shared learning. While there is no "one size fits all" approach to new solutions, it can be helpful to identify and review examples from other places.

In developing this Practice Note, we recognize that practitioners, researchers, local communities, and organizations have different interests and roles to play in better integrating natural and cultural heritage for a more respectful, just, and sustainable world. Taking a collaborative approach is fundamental and is strengthened by working with a mindset of openness, engagement, inclusiveness, curiosity, and a desire to find common ground. While valuing theoretical frameworks, we aim in this note to provide practical suggestions, applying a learning-by-doing approach. We encourage you to try things out, be creative, and help to build a wider and more diverse community of practice by sharing your experiences.

Purpose

What is a Practice Note? We use the phrase to mean the sharing of our collective knowledge, experience, and insights in the work undertaken to better integrate natural and cultural heritage practices. We are not providing "guidance" like that available in, for example, the International Union for Conservation of Nature (IUCN) Best Practice Guidelines¹ or the Australia ICOMOS (International Council on Monuments and Sites) Burra Charter Practice Notes.² We offer practical advice, tips for good practice, and potential directions, as well as encouraging self-reflective practice. Finally, we use generalized case examples rather than referring to specific places and issues. For case studies that focus on specific places and solutions, visit the PANORAMA Nature–Culture thematic community.³

This Practice Note considers ways to work with people associated with your heritage place to better recognize, develop, and promote approaches that link natural and cultural heritage in ways that benefit the places and people. It builds on experiences from a range of international projects and research undertaken in the last decade that has sought to bridge or transcend the divide between nature and culture in heritage conservation practices.

- 1. https://www.iucn.org/theme/protected-areas/resources/iucn-wcpa-best-practice-guidelines-protected-area-managers-series
- 2. https://australia.icomos.org/publications/burra-charter-practice-notes/
- 3. https://panorama.solutions/en/portal/panorama-nature-culture

We have drawn on our own professional experiences in exploring the different ways that cultural and natural heritage can be interconnected. These explorations were stimulated by an awareness that the culture–nature divide can cause adverse outcomes for people and for the protection of the heritage places we seek to care for. We can do better by seeking approaches that recognize and attempt to bridge the divide supporting effective and sustainable conservation practices. A key aim of the Practice Note is, therefore, to promote awareness of diversity and mutual respect for multiple views and understandings. Above all, it is about working together, fostering dialogue, and creating long-lasting and equitable approaches to conservation.

Scope

This Practice Note focuses on caring for and safeguarding *heritage places* (including landscapes/waterscapes), and promotes practices that are important to communities, to present and future generations, and to the sustainability of our planet. This Practice Note is intended to be applicable to all heritage places, no matter their size or whether they have been recognized for their local, regional, national, and/or international significance. Likewise, it can be applied to improving approaches to research, public and private administrative systems, and everyday practices.

The intended audiences for this Practice Note are broad, encompassing everyone seeking to better integrate natural and cultural heritage in their work practices or stewardship responsibilities. In addition, and in recognition of the diverse projects being undertaken to do this, the Practice Note aims to stimulate dialogue amongst a wide diversity of actors, including people in national agencies, non-government organizations, representatives of Indigenous and local communities, practitioners, and academics. In Part 5 of this Practice Note, we suggest other ways in which it might be used, such as in teaching, capacity building, and heritage advocacy.

Terminology

This Practice Note acknowledges that the terms and concepts used for natural heritage and cultural heritage are specific to cultural and organizational contexts, communities of place and practice, professional fields, and languages. Indeed, the very idea of nature and culture being separate—and therefore in need of integration—is not found in the worldviews and languages of many cultures. Box 1 provides definitions of key terms we use.

In offering the meanings provided in Box 1, we are mindful of this diversity of perspectives. These terms and their definitions are based on the experiences of the authors and describe the ways in which the terms and concepts

BOX 1. TERMS USED IN THIS PRACTICE NOTE

Place. A geographically defined area. Place has a broad scope and includes natural and cultural heritage, tangible and intangible dimensions (including identity and memory), and is inclusive of landscapes and waterscapes.

Actors. People, communities, organizations, and institutions associated with a place.

Values. The qualities and meanings that are attributed to a heritage place by individuals, communities, cultural groups, and heritage institutions.

Attributes. Tangible and intangible features or characteristics of a place that convey or embody the heritage values of that place.

Governance. Structures and arrangements that establish *who* makes decisions and *how* decisions are made. *Governance* includes legal and customary frameworks, policies, and recognition of rights.

Management. All the processes of caring for and safeguarding the significant attributes and values of a heritage place. Management includes the coordination, administration, and implementation of tasks to achieve conservation goals.

are applied for the purpose of this English-language version of the Practice Note. While this work acknowledges the multiplicity of other interpretations, the meanings included in Box 1 are an initial attempt to promote clearer communication among people with diverse professional and cultural backgrounds. There are more comprehensive glossaries of these terms available from other sources. (See Part 6 for some resources).

This Practice Notes speaks about the integration of *natural and cultural heritage* since these are often separately established realms of institutional practice. When we speak of *integration*, we wish to generate a dialogue rather than expecting that natural and cultural heritages should always be brought together in any one way. We also draw on the conjoined noun, *naturecultures*, first used by Donna Haraway to recognize that the natural and human environment, including non-human and more-than-human beings (such as spirits, creation ancestors, divinities) are intimately bound, integrated, or entangled within different places. We argue that better integration of *naturecultures* is beneficial for effective conservation practice and outcomes of many (if not most) heritage places.

In Box 2 we provide a word cloud with some of the nature-culture terms that are important in this Practice Note.



2. CONTEXT

The separation of nature and culture is a dualism arising mainly from Western philosophies and doctrines, and is driven by the desire in many societies to manage and control nature. These ideas have been imposed onto many cultures with different worldviews. Embraced or selectively assimilated by some groups and resisted by others, it is a source of continuing harm to many cultural groups, Indigenous Peoples, and local communities. In other cases, such philosophies and ideas were slowly integrated into other contexts and cultures through larger globalization processes.

The practices and approaches that separate natural heritage from cultural heritage are, to a large degree, a consequence of this widespread nature–culture dualism. Legislation, policy, administration, and on-ground practices are typically divided into either natural or cultural heritage. In some countries cultural heritage is further divided into Indigenous heritage and settler–migrant, historic, or colonial heritage, each with its own management approaches and systems.

The consequences of these separations vary. For societies and systems that work in this way, understandings of place may not be holistic and the relationships among theoretical, disciplinary, and administrative systems can be poorly aligned or in conflict (see Box 3). Such separation can also detrimentally affect cultural practices, and the respect and recognition of rights, rather than promoting diversity.

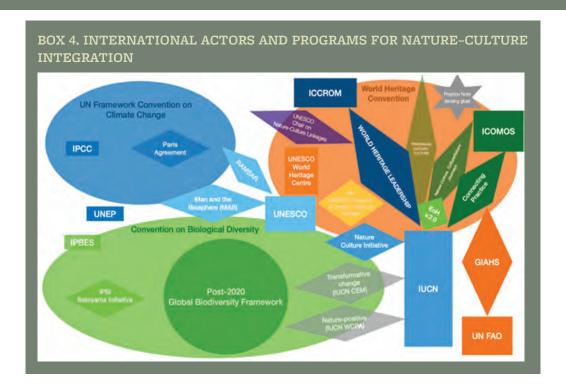
In recent decades, work has been undertaken at international, national, and local levels to recognize these problems and their consequences. The graphic in Box 4 illustrates some of the efforts by different organizations, projects, and teaching courses to explore ways to promote integration between the two fields. The diagram is not intended to be definitive and does not look deeper to recognize the many national, local, and community efforts. However, it

BOX 3. CULTURAL HERITAGE, NATURAL HERITAGE, OR WEED?

You are invited to facilitate a meeting to discuss whether a certain plant species within a historic garden should be retained or removed.

- On the one side of the table are a site manager, a botanist, and a senior policy officer, who argue for the
 complete removal of the plant from the historic garden because it is considered a weed species that could
 threaten the integrity of a nearby native forest.
- On another side of the table are a horticulturalist, a historian, and a head gardener who argue for the plant's
 retention as a significant cultural planting in the historic garden. They argue that the spread of the plant can
 be avoided by good maintenance practices.
- On a third side of the table are representatives of the Indigenous Peoples whose territory includes the area where the garden is located. They can understand both arguments but support retention of the plant species in both the garden and forest because of the role it plays as a source of food and a medicine over recent centuries.

What are the key issues here? How would you facilitate this discussion? What might a resolution look like? Be aware that there may not be a single response and these discussions may vary with context.



acknowledges that there are many people working on these issues and highlights the complex interactions of actors working to understand and better address the separation of natural and cultural heritage practices. The results and lessons learned from such projects have informed the Practice Note and are included in the "Resources" section (Part 6).

3. GETTING READY: WHAT DO YOU NEED TO KNOW BEFORE TAKING ACTION?

In Parts 1 and 2 of this Practice Note we outlined the historical context and global work being undertaken to better integrate natural and cultural heritage practices and approaches. Before diving into the steps in Part 4, it is important to consider some current trends or shifts in concepts that have implications for approaches to heritage conservation.

Work on the integration of natural and cultural heritage practices and approaches does not take place in a silo; rather, it fits within a larger context and draws on an understanding of what constitutes heritage and good practice for conservation. In this section on "Getting ready," we recognize that the idea of heritage has expanded from heritage as mainly physical "things" to include processes, associations, and traditions.

Think of an octopus! It has eight limbs attached to its body. To understand how an individual octopus functions, we cannot look at just one of them. Rather, we need to see the bigger picture, the whole animal. And that octopus is part of a wider community and environment. Using this analogy, we might see the work of integration of natural and cultural heritage as part of a heritage system, which, in turn, is influenced by even bigger social-ecological systems (i.e., integrated systems of people and nature). We can focus on one part when needed, but we also need to be constantly mindful of the whole system. So, there can be a lot of "limbs" or elements to juggle, as suggested in Box 5.

BOX 5. CAN AN OCTOPUS JUGGLE?

Working in the field of heritage necessitates juggling many parts and being aware of the wider social-ecological system in which that heritage is situated, including concepts and principles such as sustainability, futures, adaptive management, listen and learn, people and communities, rights, place values, and transdisciplinarity.

Social-ecological systems integrate systems of people and nature, emphasizing that humans are part of nature and that the delineation between social and ecological systems is artificial. Natural and cultural heritage play a role in all parts of these systems.

There are some big and important themes that need to be kept in mind when working on improved integration of natural and cultural heritage. We can think of these themes (or topics) and their associated approaches as filters: each decision and action proposed in relation to *naturecultures* should be reviewed against these matters of concern as well as wider heritage and societal purposes.

Heritage place and values

In the work of conservation, two approaches are commonly applied: first, a *place-based approach* which focuses on specific areas or "sites" (as well as their wider settings) valued by people and communities for their natural and cultural heritage significance; and second, a *values-based approach* which seeks to identify and conserve the values attributed by people and groups to places. Each of these will require a regular review to ensure that all values are recognized.

Rights

Enjoyment of and access to heritage is a human right, part of the suite of cultural rights recognized internationally. The specific rights of Indigenous Peoples to continue their cultural practices and stewardship of their lands and waters has also been internationally endorsed. There is also an emerging recognition of the rights of nature, with potential consequences for heritage management. *Rights-based approaches* are widely recognized as central to the

FIGURE 1. A ROADMAP TO APPROACHES TO INTEGRATING NATURAL AND CULTURAL HERITAGE

How can I begin to understand the ways integration of natural & cultural heritage works – and the benefits of such approaches? Go to: GETTING STARTED



GETTING STARTED responds to these questions:

- 1. Why should I care about natural and cultural heritage integration? Or, how can I convince others that this is important?
- 2. What dimensions of a place can I explore to start understanding natural and cultural integration better?
- 3. How can I use this knowledge to build a foundation for protecting a place in an integrated way?

Think about INTERDISCIPLINARITY

I have some understanding of the ways integration of natural & cultural heritage works. What should I do now? Go to: DIGGING DEEPER



DIGGING DEEPER responds to these questions:

- 4. What do I need to do to assess the values of a place in a holistic manner?
- 5. How can I understand the interconnected character of values and the inter-dependencies among them?
- 6. How might the management and governance arrangements be enhanced to better care for the place from an integrated perspective?

Think about VALUES

How can I strengthen the governance & management of a heritage place to better integrate natural & cultural Heritage? Go to: MOVING FORWARD



MOVING FORWARD responds to these questions:

- 7. How can I strengthen the governance of a heritage place to better enable an integrated approach to natural and cultural heritage practices?
- 8. How can I strengthen the management mechanisms for a heritage place to improve natural and cultural heritage practices' integration?
- 9. What can I do to help move the discussion forward and promote better natural-cultural conservation practice?

Think about GOVERNANCE & MANAGEMENT

Where should I begin?

- If you are unfamiliar with the work of nature-culture integration, begin at STEP 1
- If you have some experience in nature-culture integration, begin at STEP 3
- If you have a good knowledge of nature-culture integration, begin at STEP 4

work of conserving natural and cultural heritage, although this will mean different things in different places. The work of integrating natural and cultural heritage practices can be helpful in efforts to fully recognize human and non-human rights, empowering rights holders, and creating equitable change.

People and communities

People-centered approaches, when applied in heritage conservation, give emphasis to how Indigenous Peoples and local communities value and care for heritage places. This is a dynamic relationship and can change over time. For the work of *naturecultures*, this means that engagement, participation, dialogue, and collaboration are essential.

Working across disciplines and knowledges

The involvement of multiple disciplines in the work of understanding and interconnecting natural and cultural heritage practices is essential. Interdisciplinary approaches combine knowledge and methods from different disciplines to analyze and provide a solution to a problem. Transdisciplinarity integrates and transcends interdisciplinary approaches and is inclusive of Indigenous, local, and other knowledge systems.

Adaptive management

Adaptive management is a "learning-by-doing" process that emphasizes the value of practice, being creative, sharing ideas, and building communities of practice. It applies a structured method to support decision-making, allowing for flexibility and adjustments to management directions. *Adaptive management approaches* are based on transdisciplinary methods and are inclusive of natural and cultural heritage and broader social-ecological systems.

Sustainable development

Sustainable development means development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Like natural and cultural heritage, the four dimensions to sustainable development—society, environment, culture, and economy—are intertwined, not separate. Heritage has the ability to contribute to sustainable development.

Futures

A heritage futures approach, including scenario planning, asks us to consider the ways in which our choices and actions today shape the kinds of heritages that are passed on to future generations. For example, decisions concerning climate change adaptation made in the present can impact the kinds of natural and cultural heritage that survive into the future.

So, with our tentacles at the ready, let's get going!

4. TAKING ACTION ON NATURE-CULTURE INTERLINKAGES

In Part 4 of this Practice Note, we present information on taking action under three headings: Getting started; Digging deeper; and Moving forward. The overall approach to integrating natural and cultural heritage practices in conservation is shown in the roadmap (Figure 1). These sections offer suggestions to consider in strengthening your understanding of the ways integration of natural and cultural heritage is expressed in your heritage place, to assess its values, and to examine governance arrangements and management processes.

You can begin at any point in the diagram focusing on the key questions most relevant to you based on your existing knowledge and experience of a place and of the ways in which natural and cultural heritage are interconnected and interdependent.

Getting started

Step 1: Reviewing current knowledge and issues

Begin by reviewing what you know, reflect on what you may not know, and consider what you want to achieve.

Why should I care about natural and cultural heritage integration? Or, how can I convince others that it is important?

Heritage can be understood to be natural as well as cultural and to encompass tangible and intangible attributes. It can include a diverse array of interwoven natural and cultural values, including biodiversity, agro-biodiversity, and geodiversity, as well as historical, scientific, artistic, and social values and cultural traditions.

Here are some points to think about and discuss with colleagues.

No heritage place is fully natural or cultural. In some places the inter-relationships between natural and cultural heritage are readily observed and may be recognized through typologies such as cultural landscapes. In other places the linkages can be more subtle—such as in a wildlife reserve that includes ancient rock art or landforms that hold spiritual significance to communities, or a thriving urban center which has been shaped for centuries by its geography, climate, and natural resources. No place exists in isolation from its geology, hydrology, topography, or biology, and everywhere has a human history.

What is less visible is not necessarily less important. Every place is part of a social-ecological system and has a particular history. A focus on certain values such as biodiversity or historical significance may cause others to be overlooked, such as geodiversity or spiritual values. Likewise, a focus one type of attribute—such as endemic species or archaeological materials—can overlook other attributes that are fundamental to the functioning or dynamics of a place, such as traditional grazing practices or water flows, with possible detrimental outcomes. Understanding the diversity of values of a place (and the attributes that convey them) can help to maintain and enhance its special qualities.

Something that benefits one aspect may come at the detriment of another. Our individual disciplinary backgrounds shape the way we see and care for places. In some cases, nature conservation practices have disrespected human rights, and in other cases resource use decisions have diminished the functionality and health of ecosystems. Working in an interdisciplinary way can help to ensure that the safeguarding of important places is based on a holistic understanding of their values, attributes, and associations.

Recognizing rights. All people have rights to their identity, their worldviews, and their heritage. As noted in Part 3, some groups, such as Indigenous Peoples, hold rights associated with their powerful, long-time connections with their territories. The rights of nature, and for present and future generations of people to experience healthy and well-functioning ecological systems, are also essential considerations.

What is considered as heritage today reflects past histories, meanings, and practices. A place is the result of cumulative changes over time. Much of what we consider to be heritage today is the legacy of decades or centuries of people caring for their places. Understanding how any place was cared for, protected, or impacted in the past can help us understand how the place is perceived today, why it is considered important, and by whom.

BOX 6. REVIEWING CURRENT KNOWLEDGE AND ISSUES—KEY MESSAGES

- Understand the diversity of reasons why a place is or may be important, and to whom.
- Understand and appreciate the history of a place and why certain natural or cultural attributes and/or values have been emphasized in the past.
- Consider how our worldviews, cultural perspectives, disciplinary training, and personal experience can shape the way we privilege certain natural or cultural attributes of a place.

Step 2: Exploring concepts

To explore approaches to better integrating natural and cultural heritage at a place, it is useful to find common ground for discussion and exchange. Here we focus on the aspects which are most useful in understanding their inter-relationships.

What dimensions of a place can I explore to start understanding natural and cultural integration better?

In some cases, it will be important to understand that commonly used terms will not mean the same thing to everyone—this is sometimes experienced when working across disciplines. Here are some ideas that we have used to underpin this Practice Note.

Professional bias limits what we look at, what we see, and how we understand what is important. Professional expertise is developed over time and is often a valued entry point to our work in heritage management. However, these same strengths can also create areas of inattention or limit our insights. If we mostly work in organizations or groups of people with similar professional or disciplinary backgrounds, we may not realize the importance of certain elements of a place.

BOX 7. INTERDISCIPLINARITY?

"Watch out!" Steve called to Bas. "You are about to tread on a rock engraving." "Watch out!" Bas called back. "You are standing on an endangered juniper bush."

While Steve and Bas had complimented themselves on being able to work across nature-culture boundaries, in practice they readily fell back on their disciplinary foundations (archaeology and environmental science).

While disciplinary expertise is important, a willingness to engage and learn from other fields is essential to more deeply exploring the complex relationships between natural and cultural heritages. So, in what ways do the values of engravings and junipers contribute to the meanings of this heritage place?

Some professionals do not see the lack of integration between natural and cultural heritage as a problem and might prefer to stay within their comfort zones inside their disciplinary boundaries. Even when disciplinary experts are aware of multiple views of why a place may be important, they can find it difficult to communicate and share knowledge with professionals from other fields. Some may even feel that crossing disciplinary boundaries distracts from addressing what is important within each field.

Values are socially constructed. Values can be personal (such as the importance people give to an inherited family object or story), or collective (the shared values given to a place by a community or society). What we regard as heritage 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 different reasons. Values also change over time and can be lost owing to contemporary choices or because of trauma or community displacement.

Thinking about the range of values ascribed to a place can assist in breaking down the separation of natural and cultural heritage. We can think about the history of a place in terms of both its environmental history and in relation to the connections and relationships people and communities have had with it over centuries and millennia. For example, we can understand and value the openness and accessibility of a forest while also recognizing that it is the result of millennia of Indigenous cultural burning and harvesting practices. In this case, the natural and cultural values of the forest are deeply intertwined.

Institutional and legal arrangements may separate what is, in reality, integrated. It is common for the legal, policy, and administrative systems in many countries to separate natural and cultural heritage. That is, different laws and government departments will be responsible for natural heritage (including protected areas, threatened species, and biodiversity) and cultural heritage (including Indigenous, architectural, and archaeological places, and intangible heritage). There are also situations where natural and cultural heritage specialists work in the same organization,

BOX 8. FOSSILS—NATURAL OR CULTURAL?

"Of course, all fossils are scientific objects!" Paleontologist Ana was emphatic when she stated this to Otto, an archaeologist. Ana and Otto were meeting to discuss the content of a new course they would be teaching on human evolution.

"Modern humans (*Homo sapiens sapiens*) are cultural creatures" responded Otto. "Their fossil remains are most certainly cultural heritage, as are the fossils of all ancestral hominids."

After some reflection, Ana asked, "So where is the distinction between natural and cultural fossil remains? Do we need to make this distinction?"

The conversation between Ana and Otto illustrates the complexities that can arise in trying to separate natural and cultural heritage. Why are fossil sites with modern human remains (up to 200,000 years old) typically categorized as cultural heritage, whereas fossil sites with the remains of ancient human ancestors (up to nine million years old) considered as the story of natural evolution?

How do these contrasting views influence our management practices when fossils are present?

but with separated roles that discourage dialogue or collaboration between them. This may facilitate public administration processes but pose an impediment to effectively safeguarding natural and cultural heritage.

Placing emphasis on either the natural or cultural heritage at a place through separated institutional or administrative arrangements may contribute to the loss of important values over time. For example,

- Designations such as "wilderness" or "archaeological park" may contribute to displacement of Indigenous
 or local communities, limiting their ability to access resources and significant locations and continue their
 traditional practices.
- Governance arrangements for a place may emphasize the role of a government agency (or public administration) and exclude communities who have long-held responsibilities for the place.

BOX 9. SEPARATE MANAGEMENT PLANS FOSTER SEPARATE THINKING

Some heritage places have separate management plans for cultural heritage and natural heritage. Or, they may have a single management plan, but the sections on cultural and natural heritage are separated and written by different specialists or teams rather than integrated. Is this the situation with the heritage place you are working with? What might an integrated management plan look like for the heritage place? See Step 8 of this Practice Note.

Step 3: Engaging in dialogue

Now that you have gathered a wide range of background knowledge of your place, it is important to engage with the many different actors that have interests, responsibilities, and associations with the place. This dialogue should include sharing knowledge, understanding challenges and opportunities, and forming a vision for the future.

How can I use this knowledge to build a foundation for protecting a place in an integrated way?

The knowledge that you have assembled can serve as the foundation for co-creating a process for a vibrant ongoing dialogue among the various people and organizations associated with the place. Places have a diverse array of values and attributes and a wide range of people that care for them—so it is important to recognize and engage with people from various academic disciplines, as well as local officials and associated communities. There may be conflicts within or between communities and other groups, so crafting ways to start and sustain the dialogue will vary. The dialogue itself can also advance integrative approaches to cultural and natural heritage and understandings of places as complex, dynamic systems requiring inclusive and polycentric governance structures.

Six important considerations. Once you have a clear understanding of the purpose of dialogue there are several things to consider when assembling and working with a team of interdisciplinary colleagues and community members.

- 1. *Consider a process for working together with others*. Ideally a process will be co-designed in ways that involve people and organizations who collectively agree on objectives and ways of working together. Appointing appropriate convenor(s) to facilitate the work on objectives and collaboration is important. The convenor(s) should be respected and trusted by all involved and be able to work with all parties.
- 2. Consider how to initiate and sustain a collaborative process for the dialogue. As far as possible, the process should be co-created to sustain an effective collaborative working environment. Emphasis should be placed on inclusiveness, openness, accessibility, and transparency in the process used to identify and engage key actors including stakeholders, rights holders, communities, organizations, and institutions.
- 3. Be open to a diversity of perspectives. Participants should include individuals representing relevant disciplines, community groups, and institutions, as well as representation across genders, ages, and ethnicities. Consider the roles of social groups and organizations that hold different knowledges and perspectives on the place and/or have various roles in its care, management, and governance. Consider undertaking a detailed assessment of actors and their interests, relative power, rights, levels of involvement, and dependency on the place. Techniques such as "stakeholder mapping" can be useful for this task.
- 4. *Involve a diversity of worldviews*. Including actors associated with the place that have different conceptions of the world (including Indigenous and faith communities) will assist in addressing management challenges and opportunities. Interdisciplinary and multi-perspective approaches are needed.
- 5. Consider how language is used. Even when people use the same terms, they can have different meanings or implications. A good starting point is to explore how each participant understands "nature," "culture," "natural heritage," and "cultural heritage." It can be surprising to learn that these can have very different meanings for individuals, community groups, and disciplines. If people are not working in their first languages, it is even more likely that there will be nuances that are not the same.
- 6. *Be a champion!* Not everyone is able to establish and maintain dialogues. Nevertheless, anyone can be an advocate and a champion for the better integration of natural and cultural heritage practices (see Step 9).

Digging deeper

Step 4: Assessing the values

Once conversations with different actors have started and relationships are being strengthened, you can begin to apply integrated and place-based approaches to natural and cultural heritage in your work. In this section, we provide *suggestions on how to deepen understandings of the multiple values of a place*—that is, the values held by communities and cultural groups, as well as institutions (see Box 1).

The work to better integrate natural and cultural heritage practices takes time, requires resources, and needs to be undertaken in respectful and ethical ways: a realistic scope is part of a learning-by-doing process.

What do I need to do to assess the values of a place in a holistic manner?

In Step 2, we noted that what is valued by one part of a society may not be valued by another or may be valued for different reasons. To better understand how different communities and social groups might value a place, we need to reach out, engage with people in different ways, and bring people together. Here are some key points to consider in undertaking such work.

Begin by *identifying the different values* held for the place and *who holds those values*. There are many techniques for doing this depending on the number of people you need to meet, the diversity of participants, cultural protocols, and so on. The idea of "values" may not be familiar to everyone, so you can start the conversation by asking participants to speak about places that are special to them and why. Sometimes maps, documents, or images can help to facilitate this discussion, and it is often easiest to have these discussions in the place itself, since this can stimulate important feelings and memories.

Discussions about places and values can occur at different scales—from the whole place (landscape, city, forest, or mountain) to individual elements within this larger frame. Some resource materials that offer different methods of doing this are provided at the end of this Practice Note. After a few discussion sessions, you will probably have a long list and many notes about different expressions of value and "specialness." It is possible that some of these will overlap, conflict, or include different perceptions that apply to a single place.

Next, you can begin to group the information you have collected into the different ways that values are associated with the place. The values can be related to histories and past land uses, ecologies, Indigenous and local community traditions and practices, spiritual beliefs, geology and landforms, beauty or sounds, science, and technology, etc. At this stage, you can also begin to think about the ways that the values relate to natural and/or cultural processes and the ways that they are interconnected. It might also be useful to organize the information spatially, such as on a map. This can reveal where values are recognized and experienced, and how they might complement or conflict with other values.

Questions to ask of the collected information include:

- Who holds each value? Is the value common to several groups or held by one group or part of one group (maybe just a single family)?
- How strongly is the value held? This may relate to the number of groups holding that value, the length of time it has been held, or the cultural context within which the place is located. But it could also be based on the intensity of importance for a small number of people.
- What level of significance does the value meet? This can have implications for the governance arrangements and legal protection. As we've seen, the value can be important to a cultural group, a family, a local community, a region, a country, or the world.
- Are there values missing? If you suspect that there are gaps, it may be that there are gaps in the groups of people and/or disciplinary perspectives you have been working with. You might need to broaden the dialogue and go back to the people already involved to explore further.
- *Are there conflicts between different values?* Do different groups hold different connections to the same place in ways that may not be compatible? For example, see Box 10.
- What features or uses of the place do people identify when speaking about why places are important to them? We will work with this dimension further in the next step, but it will be important to note this as you work to document values.
- Are there multiple designations that highlight different elements? Increasingly places are covered wholly or in part by more than one international and/or national system of heritage designation. For example, the place may be a landscape inscribed as a mixed site on the United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Heritage List that also includes a wetland recognized to be of international importance under the Ramsar Convention, as well as containing agricultural areas recognized as a Globally Important Agricultural Heritage System (GIAHS). There are also common instances of multiple designations involving UNESCO recognition of Intangible Cultural Heritage and/or UNESCO Global Geoparks. These different systems of designation emphasize different values. To what extent do the approaches, concepts, and management activities for which the place is separately listed align, overlap, and/or conflict?

You are ready to move to the next step on the interconnections between values and attributes when you have a sense of the values that different people associate with this place or landscape. Values can change over time, and can be affected by new events, losses, discoveries, and movements. So, even for places where associated groups have worked

BOX 10. CONFLICTING VALUES

The introduction of new animals into societies and territories where they did not previously exist can create conflict. In Australia, the dingo (*Canis lupus*) was likely introduced some 3,500 years ago and is now considered to be part of the continent's native fauna.

By contrast, Timorese water buffalo (*Bubalus bubalis*), introduced into northern Australia from the 1820s, are valued in different ways.

- For some Aboriginal peoples, the buffalo has become integrated into their belief systems and cultural practices—including representation in rock art.
- · However, for many protected area managers, buffalo are a cause immense damage to ecological systems.

Consequently, buffalo are valued differently and there is no easy or obvious compromise position between the different value systems.

through the values very thoroughly as a basis for management, it will be necessary to return to these considerations from time to time.

Step 5: Exploring interconnections

Once the spectrum of values of a heritage place has been identified and assessed, you can begin to *explore the deeper* relationships and interconnections between different values and the attributes that convey them. Some connections will be more evident than others and some may require further research and interdisciplinary work.

In this step, the focus is on understanding and analyzing the relationships between the different values as well as the ways in which specific features, qualities, and cultural processes are related to the values (these are referred to as "attributes"; see Box 1). You can identify the attributes that convey the values identified, making sure to consider aspects that are natural and cultural, tangible and intangible. As you begin to add the attributes to your work, you can continue to note all the ways that they create overlaps. Some attributes will relate to several different values but may have different meanings to different groups of people. You might identify clusters of attributes, and you will begin to also see how some of these might need active management to be sustained.

How can I understand the interconnected character of values and the interdependencies among them?

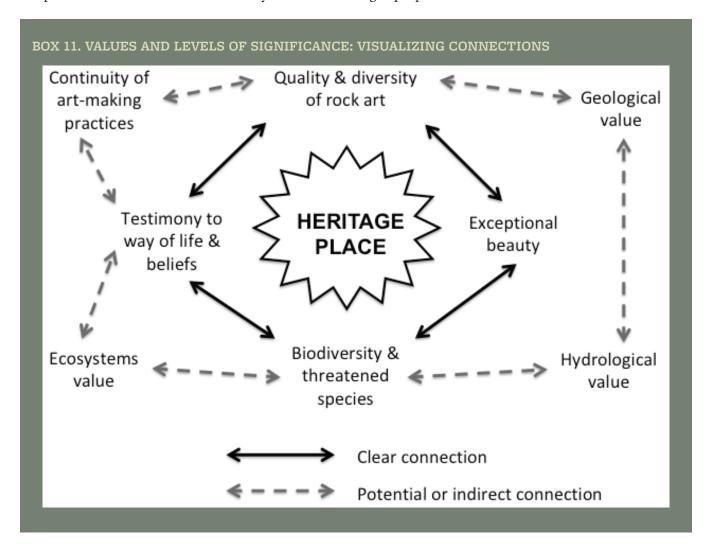
To begin, it can be helpful to *develop a scheme to illustrate the relationships across the values and how they are interdependent.* The scheme or infogram needs to show and describe the ways in which values and the levels of significance ascribed to natural and cultural values interconnect, intersect, and overlap. Visualizing these connections (as shown in Box 11) can provide a tool for stimulating discussion.

If you have already started to build a values map or infogram, these connections can be used to stimulate further discussions.

What type of relationships between values can be found? All of these are possibilities:

- Diverse values are identified, and these are observed as supporting and/or enhancing one another.
- Some values can be seen as supporting the continuation of other values.
- There can be functional dependencies or interdependencies between some of the identified values.
- There can be real or perceived conflicts between values, particularly where they have been identified by different communities or other actors (see Boxes 3, 7, 8, and 10).
- The heritage place is valued by communities for different reasons. (See Box 12 for an example.) Some local

communities and Indigenous groups might value the place for its sacredness, while also cultivating the land use practices that sustain local biodiversity and the well-being of people.



Step 6: Identifying implications for practice

Now that you have assessed the values of a place and the ways in which these values are interconnected and interact with each other, you can consider how these new understandings help you to see a range of practical matters *differently*. In this step, the focus is on reflecting on the effectiveness of governance and management arrangements to achieve better integration of natural and cultural heritage at your place.

How might the management and governance arrangements be enhanced to better care for the place from an integrated perspective?

Twelve questions are posed here to assist you and your working group to think about the current governance and management arrangements for the place in question. These are not intended to suggest a rigid sequence, but rather to offer a range of issues for your consideration.

- 1. What are the strengths and shortcomings of the institutional arrangements that arise from the understanding of values and their interdependence? For instance, a forest governed and managed effectively for its ecological values may require additional institutional arrangements to better care for spiritual connections and archaeological sites.
- **2.** *How has the history (or evolution) of governance and management* of the heritage place influenced the current legal frameworks? See Step 7, Point 1.

BOX 12. ATTRIBUTES OF NATURE?

Practitioners and communities experienced in natural heritage assessment and protection might not be familiar with the term "attributes" and feel uncertain about its use. However, more joined-up *naturecultures* practices in the World Heritage system have allowed the conceptual relationships between values and attributes to be widely applied in descriptions of natural heritage. For example:

- For places significant for their geological values, the attributes might include specific karst or volcanic features or fossil beds that contribute to the overall significance;
- For places significant for their biodiversity, consideration of attributes might involve the identification of
 endemic and threatened species, ongoing biological and ecological processes, or scale and naturalness of
 habitats; and,
- For significant protected landscapes (such as agricultural areas), the attributes might include cultural land and water management practices, flows of water and nutrients, cultivated and wild plant and animal species, or landform modifications.
- 3. What are the implications for community engagement? Are all groups who hold values for the place sufficiently involved in the governance and management arrangements? For example, a temple valued for its association with a particular historical period and managed for its architectural and artistic qualities might not be inclusive of values linked to continuing spiritual practices. In addition, the institutional arrangements for managing the temple might overlook the critically important dependence on a sacred water source, requiring protection for the larger watershed or catchment.
- 4. What new or changed protection and management arrangements will enable continuing cultural practices and the protection of the natural systems that support them? In the example of the temple, the institutional arrangements need to recognize traditional conservation practices (e.g., the role of the community in maintaining and managing water quality associated with the sacred water source).
- 5. How will you ensure effective community engagement and empowerment given that the same approach cannot always work for all community groups. In the example of the temple, how will temple priests and faith community members be included in management arrangements and represented in the governance structure? Do they have a legally recognized mandate to care for their heritage place?
- 6. How do the current governance arrangements relate to cultural practices? Who holds the knowledge of cultural practices that are key attributes of the heritage place and what role/s do those knowledge holders have in the governance system? How does the management system work to sustain the values and attributes of cultural practices? Does the governance and management system support the transmission of practices to next generations?
- 7. Are there important values and interconnections that are not formally recognized and, therefore, not specifically cared for by the current governance and/or management systems? What attributes carry these unrecognized values (e.g., water courses, groves of trees, building materials, or pathways)? Another example is humanly created shell mounds on which important plant species grow. How are those attributes managed within the current governance and/or management systems?
- 8. How does a holistic view of the values shed light on the understanding of the factors affecting the heritage place? There may be many factors and pressures creating changes, putting many of the values at risk by impacting on some of the attributes. These should be thoroughly understood. Using an integrated perspective also adds a few more considerations to the usual analysis of these factors to understand whether additional factors (or their underlying causes) arise because:
 - certain values are not sufficiently recognized;
 - there are conflicts between some values; and/or
 - there is insufficient recognition of the interdependency of values.
- 9. Are functional interdependencies of values reflected in the governance and management system? For example, where traditional grazing practices sustain biodiversity in a rural farming landscape, how are cultural practices

- and local knowledge sustained by governance and management systems? The separation of management agencies can be problematic in these types of places. Are the knowledge holders and rights holders directly involved in this practice or tradition involved and empowered by the governance arrangements?
- 10. Is the staff composition of managing institutions aligned with an expanded recognition of the interconnected natural and cultural values of the place? What are the strengths and shortcomings in terms of required expertise? For instance, the forest example in Point 1 of this list may be managed by biologists or ecologists but also require archaeologists, anthropologists, or community custodians with spiritual connections.
- 11. What governance structures and processes can be used to recognize and engage all key rights holders and stakeholders?
- 12. What platforms for and practices enabling exchange are already integrated into the management and governance system? Knowledge-sharing requires formal ways for learning whereby actors can exchange information and share understanding of the governance and management system.

At this point, you will have a clear understanding of the attributes and values that make your heritage place special and what needs to be safeguarded. You should also have a good understanding of how they reflect the interconnected character of natural and cultural elements of that place and its setting. You will also know who the key actors are and will have considered how the governance and management system is structured to best include the participation of relevant authorities, disciplines, rights holders, and stakeholders—including the extent to which those actors are responsible for safeguarding the interconnected character of natural and cultural attributes and values.

It is now time to consider how you can strengthen these findings and relationships in your management system.

Moving forward

In this section, we encourage reflection on those aspects of a heritage place that may need to be strengthened through coordination and collaboration. This can be wide-ranging—potentially involving governance and management challenges, identification of values, and inclusion of different types of knowledge.

It can be challenging to coordinate different actors in the work to improve integration of natural and cultural heritage practices. While traditional and customary systems do not usually create a nature–culture divide, formal legal and public administration systems often do and may be difficult to change. We therefore promote the idea that change can come in many forms, and that small, carefully implemented actions can lead to positive outcomes and benefits.

Ultimately, the long-term stewardship of heritage places rests on both management and governance. Stewardship is broadly understood to refer to care of places and their natural and cultural heritage. Making a clear distinction between management and governance is key to deal effectively with the questions of "what to do" and "who decides." Whereas in the nature conservation field this distinction is commonly discussed, it is not as frequently used in cultural heritage.

While it is important to recognize that management and governance are distinct, they are closely intertwined in the process of caring for places. Each depends on the other to achieve lasting stewardship.

Step 7: Improving governance arrangements

Governance—who decides and how decisions are made (see Box 1)—determines whether actors with responsibilities, rights, knowledge, and experience of cultural and natural heritage are "at the table" (i.e., engaged and empowered in decision-making).

How can I strengthen the governance of a heritage place to better enable an integrated approach to natural and cultural heritage practices?

What are the important aspects of governance? Since governance is about who makes decisions, how the decisions are made, and how appropriate and fair those decisions are, this is an essential piece in facilitating more integrated practices.

A cross-cutting matrix was developed about two decades ago illustrating how different categories of protected areas exist under different kinds of governance. This framework, used by many in the nature conservation field, identifies four major types of governance: by government entities (at various levels); by private actors; by Indigenous Peoples and/or local communities; and by shared or collaborative governance. As previously mentioned, in many cases these types may not be directly applicable in the cultural heritage field where governance arrangements tend to be more complex, especially in larger heritage places such as cities or cultural landscapes.

Given the inclusive and participatory approaches that are promoted in this Practice Note, shared governance may often be appropriate. Likewise, there may be situations where a heritage place is under Indigenous or community-led governance, and it is important to support and reinforce these arrangements.

While the early discussion and debate about governance focused on governance *diversity*—ensuring that systems included many different actors—more recently, the focus has been on governance *quality*. Principles of good governance encompass considerations related to legitimacy and voice, direction, performance, accountability, fairness, and rights. There is also the dimension of vitality, referring to the ability of governance systems to be adaptive and dynamic. This includes the transmission of knowledge within and between generations.

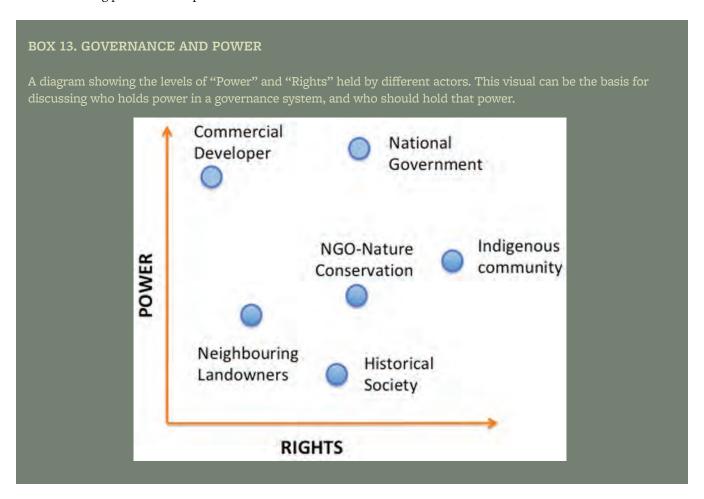
What aspects of governance should I focus on? The following four dimensions of current governance arrangements are those that often create the greatest challenges for integrating natural and cultural heritage practices.

- 1. Governance history. How did the governance arrangements develop over time for this place? This is important as, in some cases, the governance of a place may have been subject to long-time customary authority or traditional practices by local communities. This may have been more recently replaced by legal and administrative systems that place different values on natural or cultural heritage. Understanding the history of governance can shed light on historical connections and separations between natural and cultural heritage and provide clues for a more balanced future governance arrangement.
- 2. Legal frameworks. Familiarity with the ways in which relevant legal frameworks define and conceptualize natural and cultural heritage is an important step. Both national and local laws are likely to be relevant—including heritage-specific laws and other relevant legal instruments. These might include laws and regulations for agriculture, forestry, mining, water, urban planning, and protected areas, as well as strategic plans at large scales. Legal frameworks will also establish land tenure, rights, and access to lands, waters, and resources for Indigenous and local communities. Which legal instruments might be used to build partnerships, strengthen collaboration, and create a more inclusive and integrated governance structures?
- 3. *Institutional arrangements*. What are the current institutional arrangements? Do they fully reflect the values of the heritage place? Where are improvements needed in the arrangements for representation, participation, and coordination? How do the institutional decision-making processes function and play out locally? Are localized coordination structures necessary? Is it necessary to strengthen existing relationships and power structures?
- 4. Recognizing rights and responsibilities. Are rights holders with socially recognized responsibilities for managing the heritage place (or certain aspects of it) part of the governance structure? Are rights holders and stakeholders engaged in the governance processes? Do they represent the diversity of natural and cultural values ascribed to the heritage place? What are the power dynamics in the governance arrangements?

Working through these four dimensions of governance will reveal strengths, weaknesses, opportunities, and threats arising from the current governance structure for your heritage place. This can be the basis for developing proposals for change that can improve its equity and representativeness. We encourage you to regularly review governance arrangements to achieve improved and inclusive decision-making across natural-cultural heritage domains.

Power is an important consideration in any governance arrangement. That is, who holds power in decision-making? Who can be held accountable for the decisions taken for a given heritage place according to legal or customary means? Is it an agency with either a natural or cultural heritage mandate? And to what extent does a single actor dominate decision-making versus collaborative, shared, and equitable practices among actors? In the diagram in Box 13, we illustrate the relationships between "power held" versus "heritage rights" for six groups that might be represented

in a governance arrangement. This actor mapping method can be useful for understanding power relationships. If undertaken collectively with relevant actors, it can be a great basis for discussing and analyzing governance and decision-making processes and practices.



Step 8: Improving management mechanisms

Like governance, management should be closely examined. Just as governance requires multi-actor arrangements, so management requires cross-sector, collaborative effort. In this section we briefly consider the tools developed to aid management—such as management plans (or conservation management plans)—since many heritage systems require and rely on these.

How can I strengthen the management mechanisms for a heritage place to improve the integration of natural and cultural heritage practices?

Management Plans (or Conservation Management Plans) are commonly used mechanisms that guide day-to-day decision-making, ensuring the conservation of heritage places. If the place where you work has such a plan, it can be an excellent platform for rethinking the integration of natural and cultural heritage.

While much has been written about what management plans are, there are five key points that can support changes to management planning processes to better integrate natural and cultural heritage:

- 1. Cross-sector engagement, participation, and collaboration in the preparation, revision, and implementation of management plans;
- 2. Effective recognition of the diversity of natural and cultural values and their attributes (including identification, documentation, and assessment actions);

- 3. Adoption of management approaches that fully integrate natural and cultural heritage management, including the objectives and policies that frame everyday decision-making;
- 4. Application of adaptive management approaches (see Part 3) that are inclusive of natural and cultural heritage; and
- 5. Sharing of responsibilities in implementation.

To improve management effectiveness, you may need to change the ways in which heritage management planning takes place within your heritage place or in the broader heritage system in which you work.

Shared information systems that integrate natural and cultural heritage are an essential management mechanism. These should support interactions with a wide range of people and sustain collaborations. Mechanisms that enable the sharing of information might need to be created. A shared information system for a heritage place should:

- Respect *intellectual property rights* and the *ethics* of information management. It may be necessary to protect culturally sensitive information (including some that may be held by Indigenous and local communities);
- Allow for *information transfer* across relevant communities and institutions, incorporating necessary *security and access* arrangements;
- Avoid rigid categories and ensure natural and cultural heritage aspects are enabled and integrated;
- Create a joint repository or archive for legislation, plans, and other management instruments;
- Create joint *documentation and monitoring systems* that cross-reference data and information rather than just collecting data in silos; and
- Consider long-term data storage and security (Box 14).

BOX 14. INFORMATION SYSTEMS—SOME CONSIDERATIONS

Records management and archiving are vital components of heritage place management. Typically, records are in both hard copy and digital formats and can comprise:

- Administrative records;
- Historical documents;
- Images (photos, videos, maps, artworks);
- Research, management, and other reports;
- Records of cultural sites and flora/fauna; and
- Cultural objects and/or plant collections.

Some considerations related to better integration of natural and cultural heritage practices include:

- Who controls access?
- How is information accessed across multiple repositories?
- To what extent is information on natural and cultural heritage integrated?
- To what extent is Traditional Ecological Knowledge documented, securely stored, and accessible to the relevant custodians?
- What research opportunities do the records offer to better understand the history of natural and cultural heritage at the place?
- Are the records easily accessible to the site manager(s) at the actual heritage place?

To conclude Steps 7 and 8, there are many ways that considerations of management and governance influence each other. In any given heritage place, it is important to ask: *How do governance and management relate to larger social contexts*? That is, who holds the knowledge of practices and what roles do those knowledge holders have in the governance and management systems? How do the governance and management systems work to sustain the

heritage values and attributes? Does the governance and management system support the transmission of knowledge and practices to future generations?

Step 9: Becoming an advocate

All individuals, communities, and institutions engaged in the care and safeguarding of a heritage place can be advocates and ambassadors for the better integration of natural and cultural heritage. No matter what role or power you may have in a community or organization, you can advocate for improved conservation practices for natural and cultural heritage at local, territorial, national, or global levels.

What can I do to help move the discussion forward and promote better natural-cultural conservation practice?

Our planet Earth is facing serious and complex challenges, including those posed by climate change, population growth, loss of biological and cultural diversity, and threats to human rights and to peace and security. Each of these issues is multi-dimensional and a complex mix of social, political, economic, and environmental factors. Heritage is fundamental to our relationship to each other and to the natural environment. Heritage is linked to identity, place-attachment, community well-being, and quality of life. It is interwoven into all such "big" issues and can contribute to their solutions. (See Part 3). Our view is that the big issues can benefit from a mindset that integrates thinking on the connections between nature and humans, and natural and cultural heritage.

We finish this part of the Practice Note with four summary points or messages.

- If things have been legally and administratively divided over a long period, then it may be difficult to establish linkages between natural and cultural heritage. You can begin by researching and understanding the history of current conservation practices and the ways that governance and management operate at your heritage place. To what degree might integrated nature–culture thinking benefit the work of caring for that place and the ways it is valued?
- 2. Share your knowledge and experience with other people, groups, practitioners, and researchers to learn from them. Seek opportunities to have conversations and learn about the diverse ways that natural and cultural heritage can be integrated into management of the heritage place. Engage with people, groups, and institutions working at other places (some platforms are listed in the Resources section of this Practice Note).
- 3. *Understand your personal perspective(s) and those of your institution and/or community* on the place and its values. Are those views inclusive and open to other perspectives? What are other ways in which the place is valued and who holds those values?
- **4.** Focus on thoughtful, inclusive, and progressive work by:
 - Taking one step at a time;
 - Planning for and implementing small concrete actions which can leverage considerable change; and
 - Build momentum among colleagues and collaborators to understand the opportunities, challenges, and benefits of caring for heritage places in ways that respect and better integrate natural and cultural heritage practices.

5. AN INVITATION

To conclude this Practice Note, we invite readers and users to progress and take further the work that we have presented here. We know that the process described in Part 4 is neither a complete nor "finished" product—this was not our objective. As stated earlier in this Practice Note, our intention has been to share experience, not provide instructions or recipes. The steps that we have presented are one way of approaching work on nature–culture integration. There are many variations and, indeed, there might be completely different ways of working.

We are aware that the field of heritage is ever-expanding. We also recognize that there are many topics that we have not referenced, discussed, or explored in depth in this Practice Note. Topics deserving further investigation in the future include *naturecultures* and climate action, gender, disaster risk management, resilience thinking, technologies, and others.

Above all, we encourage users of this Practice Note to share their experiences as widely as possible—with different practitioners, communities, academics, and organizations. It is only by collaborating, learning-by-doing, and sharing what we learn that the complex and rewarding work of integration of natural and cultural heritage practices can grow and advance. We see opportunities for this Practice Note to be used in different settings (e.g., academic, government, private sector) and as a basis for a range of participatory activities. Finally, we hope that the Practice Note can be useful in the work of heritage advocacy.

We look forward to hearing about other experiences that engage with critical thinking, participatory approaches, creative exploration, and mindful practice for the integration of natural and cultural heritage. We are not looking for perfect ways of working but, rather, ways of working that provide positive outcomes for local situations and places. Lessons learned are lessons to be shared.

6. RESOURCES

Nature-Culture/CultureNature Journey

IUCN. 2016. Mālama Honua—To care for our island Earth. A statement of commitments from the nature–culture journey participants at the IUCN World Conservation Congress, Hawaii 2016. https://www.iucn.org/sites/dev/files/malama-honua-en.pdf

ICOMOS. 2017. Yatra aur Tammanah. Yatra: Our purposeful journey; Tammanah: Our wishful aspirations for our heritage. Learnings and commitments from the CultureNature Journey, 19th ICOMOS General Assembly, Delhi 2017. https://www.icomos.org/images/DOCUMENTS/Working_Groups/SDG/ICOMOS-IUCN_2017_Culture_Nature_Journey-_Yatra_aur_Tammanah.pdf

US/ICOMOS. 2018. Forward Together: A Nature-Culture Journey... Proceedings of the 2018 US/ICOMOS Symposium. https://usicomos.org/symposium/symposi

Mitchell, N., J. Brown, and B. Barrett, eds. 2017. Special Issue on "Nature-culture journeys: Exploring shared terrain." *The George Wright Forum* 34(2).

McIntyre-Tamwoy, S., and T. Badman. 2020. The CultureNature Journey for Honolulu, Hawaii, to Sydney, Australia: Reaching agreement on what's next? *Historic Environment* 32(1): 70–86.

Connecting Practice—IUCN/ICOMOS

ICOMOS International Secretariat. 2022. *Connecting Practice: A commentary on nature-culture keywords*. https://openarchive.icomos.org/id/eprint/2555/

IUCN and ICOMOS. 2015. Connecting Practice Project. Final report [Phase 1]. https://openarchive.icomos.org/id/eprint/1561/

Leitão, L., G. Bourdin, T. Badman, and L. Wigboldus. 2017. *Connecting Practice Phase II: Final report*. Project Report. Pars and Gland, Switzerland: ICOMOS/IUCN. https://openarchive.icomos.org/1841/

de Marco, L., G. Bourdin, K. Buckley, L. Leitão, and M. Thibault, M. 2020. *Connecting Practice Phase III: Final report*. Gland, Switzerland, and Paris: IUCN and ICOMOS. https://openarchive.icomos.org/id/eprint/2477/

Leitão, L., L. Wigboldus, G. Bourdin, T. Badman, Z. Tolnay, and O. Mthimkhulu. 2019. Connecting Practice: Defining new methods and strategies to further integrate natural and cultural heritage under the World Heritage Convention. In *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy*. B. Verschuuren and S. Brown, eds. London and New York: Routledge, 151–163.

Leitão, L., and S. Brown. 2023. *Connecting Practice Phase IV—Part 1: Final report*. Charenton-le-Pont, France, and Gland, Switzerland: ICOMOS and IUCN. https://openarchive.icomos.org/id/eprint/3073/

Leitão, L., and S. Brown. 2023 *Connecting Practice Phase IV—Part 2: Wayfinder heritage. Applying resilience thinking to long-term planning of heritage places.* Charenton-le-Pont, France, and Gland, Switzerland: ICOMOS and IUCN. https://openarchive.icomos.org/id/eprint/3074/1/ICOMOS-WAYFINDER-FINAL.pdf

Tsukuba University

Ishizawa, M., N. Inaba, and M. Yoshida. 2022. *Exploring nature–culture linkages beyond cultural landscapes: Lessons learned from capacity building in Asia and the Pacific.* In *Routledge Handbook of Cultural Landscapes in Asia Pacific.* K. Taylor, D. Jones, and K. Silva, eds. Chapter 9.

Ishizawa, M., I. Nobuko, and M. Masahito. 2017. Proceedings of the first capacity building workshop on nature–culture linkages in heritage conservation in Asia and the Pacific 2016: Agricultural landscapes. *Journal of World Heritage Studies*, University of Tsukuba, Special Issue.

Ishizawa, M., I. Nobuko, and M. Masahito. 2018. Proceedings of the second capacity building workshop on nature–culture linkages in heritage conservation in Asia and the Pacific 2017: Sacred landscapes. *Journal of World Heritage Studies*, University of Tsukuba, Special Issue.

Ishizawa, M., I. Nobuko, and M. Masahito. 2019. Proceedings of the third capacity building workshop on nature–culture linkages in heritage conservation in Asia and the Pacific 2018: Disasters and resilience. *Journal of World Heritage Studies*, University of Tsukuba, Special Issue.

Ishizawa, M., I. Nobuko, and M. Masahito. 2020. Proceedings of the fourth capacity building workshop on nature–culture linkages in heritage conservation in Asia and the Pacific 2019: Mixed cultural and natural heritage. *Journal of World Heritage Studies*, University of Tsukuba, Special Issue.

Useful links

- ICCROM. World Heritage Leadership. https://www.iccrom.org/section/world-heritage-leadership
- ICCROM, ICOMOS, and IUCN. PANORAMA Nature-Culture Thematic Community. https://panorama.solutions/en/portal/panorama-nature-culture
- ICOMOS. ICOMOS' Work on Connections between Culture and Nature. https://www.icomos.org/en/focus/culture-nature
- IUCN. People. https://iucn.org/nature-2030/people
- CSVPA [Cultural and Spiritual Values of Protected Areas]. *Cultural and Spiritual Values of Protected Areas*. https://csvpa.org/
- Australia ICOMOS. Burra Charter & Practice Notes. https://australia.icomos.org/publications/burra-charter-practice-notes/

Published books and papers

Booker, F., and P. Franks. 2019. *Governance Assessment for Protected and Conserved Areas (GAPA)—Methodology Manual for GAPA Facilitators*. London: IIED.

Brown, J. 2023. Towards conservation models that link nature and culture: A retrospective on stewardship of biocultural landscapes. In: *The Routledge Handbook of Cultural Landscape Heritage in the Asia-Pacific*. K. Silva, K. Taylor and D. Jones, eds. New York: Routledge, 131–150.

Brown, J., and B. Mitchell. 2000. The stewardship approach and its relevance for protected landscapes. *The George Wright Forum* 17(1): 70–79.

Brown, J., N. Mitchell, and M. Beresford. 2005. Protected landscapes: A conservation approach that links nature, culture and community. In *The Protected Landscape Approach: Linking Nature, Culture and Community*. J. Brown, N. Mitchell, and M. Beresford, eds. Gland, Switzerland: IUCN, 3–18.

Brown, S., and C. Goetcheus, eds. 2023. Routledge Handbook of Cultural Landscape Practice. London: Routledge.

Buckley, K., and T. Badman. 2014. Nature + culture and world heritage: Why it matters. In *Exploring the Cultural Value of Nature: A World Heritage Context*. C. Cameron and J. Herrmann, eds. Montréal: Université de Montréal, 105–121.

Byrne, D., S. Brockwell, and S. O'Connor. 2013. Introduction: Engaging culture and nature. In *Transcending the Nature Culture Divide in Cultural Heritage: Views for the Asia Pacific Region*. S. Brockwell, S. O'Connor, and D. Byrne, eds. Terra Australia 36. Canberra: The Australian National University, 35–52.

Gavin, M.C., J. McCarter, A. Mead, F. Berkes, J.R. Stepp, D. Peterson, and R. Tang. 2015. Defining biocultural approaches to conservation. *Trends in Ecology & Evolution* 30(3): 140–145.

Haraway, D. 2007. When Species Meet (Posthumanities). Minneapolis: University of Minnesota Press.

Harrison, R., C. DeSilvey, C. Holtorf, S. Macdonald, N. Bartolini, E. Breithoff, H. Fredheim, A. Lyons, S. May, J. Morgan, and S. Penrose, eds. 2020. *Heritage Futures: Comparative Approaches to Natural and Cultural Heritage Practices*. London: UCL Press.

Head, L. 2010. Cultural landscapes. In *The Oxford Handbook of Material Culture Studies*. D. Hicks and M.C. Beaudry, eds. Oxford: Oxford University Press, 427–439.

Holtorf, C., and A. Hogberg. 2020. Cultural Heritage and the Future. London: Routledge.

Ishizawa, M. 2018. Cultural landscapes link to nature: Learning from Satoyama and Satoumi. Built Heritage 2(4): 7-19.

Kauffman, C.M., and P.L. Martin. 2021. *The Politics of Rights of Nature: Strategies for Building a More Sustainable Future.* Cambridge, MA: MIT Press.

Larsen, P.B. 2018. Human rights, wrongs and sustainable development in World Heritage. In *World Heritage and Sustainable Development: New Directions in World Heritage Management.* P.B. Larsen and W. Logan, eds. London: Routledge, 120–133.

Myers, D., S.N. Smith, and G. Ostergren, eds. 2016. *Consensus Building, Negotiation, and Conflict Resolution for Heritage Place Management*. Los Angeles: Getty Conservation Institute.

New South Wales National Parks and Wildlife Service. 2010. *Cultural Landscapes: A Practical Guide to Park Management*. Hurstville: NSW National Parks and Wildlife Service.

Oviedo, G., and T. Puschkarsky. 2012. World Heritage and rights-based approaches to nature conservation. *International Journal of Heritage Studies* 18(3): 285–289.

Pretty, J., B. Adams, F. Berkes, S. Ferreira de Athayde, et al. 2009. The intersections of biological diversity and cultural diversity: Towards integration. *Conservation & Society* 7(2): 100–112.

Ross, A., K.P. Sherman, J.G. Snodgrass, H.D. Delcore, and R. Sherman. 2011. *Indigenous Peoples and the Collaborative Stewardship of Nature: Knowledge Binds and Institutional Conflicts*. Walnut Creek, CA: Left Coast Press.

Sinding-Larsen, A., and P.B. Larsen, eds. 2017. Our Common Dignity Initiative: Rights-Based Approaches in World Heritage. Taking Stock and Looking Forward. Oslo: ICOMOS Norway.

tebrakunna country and E. Lee. 2019. "Reset the relationship": Decolonising government to increase Indigenous benefit. *Cultural Geographies* 26(4): 415–434.

UNESCO World Heritage Center. 2009. World Heritage Cultural Landscapes: A Handbook for Conservation and Management. Paris: UNESCO.

Verschuuren, B., and S. Brown, eds. 2018. *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management, and Policy*. Abingdon, UK, and New York: Routledge.

Verschuuren, B., J-M. Mallarach, E. Bernbaum, J. Spoon, et al. 2021. *Cultural and Spiritual Significance of Nature: Guidance for Protected and Conserved Area Governance and Management*. Gland, Switzerland: IUCN.

7. AUTHORS

This Practice Note is the work of a group of individuals who have participated in global projects that examine better ways of jointly caring for natural and cultural heritage. Collectively, we have experience based on our work with ICOMOS, IUCN, ICCROM (International Center for the Study of the Preservation and Restoration of Cultural Property), universities, protected area agencies, and philanthropic organizations. However, the Practice Note does not represent the views of any particular institution or organization.

Steve Brown

Steve Brown is a senior research fellow at the University of Canberra, Australia. His research focuses on cultural landscapes, protected areas, place-attachment, Indigenous heritage, World Heritage, and everyday heritage.

Kristal Buckley

Kristal Buckley is a heritage specialist based in Australia and works as a World Heritage advisor for ICOMOS. Her research focuses on international heritage systems and practices and the integration of natural and cultural heritage.

Leticia Leitão

Leticia Leitão is an independent consultant working with cultural and natural heritage. Her work focuses on inter-linkages between nature and culture, resilience thinking, and capacity-building for management of World Heritage properties.

Nora Mitchell

Nora Mitchell is an adjunct associate professor at the University of Vermont and was previously with the US National Park Service. Her work focuses on better understanding the inter-relationships of culture and nature to support more effective and sustainable conservation.

Maya Ishizawa

Maya Ishizawa is an architect, landscape researcher, and heritage specialist from Lima, Peru, based in Bonn, Germany. She works on capacity-building on World Heritage, nature–culture linkages, landscape management, and climate change/heritage research.

Nicole Franceschini

Nicole Franceschini works as World Heritage leadership program officer at ICCROM and is a curator of the PANORAMA Nature–Culture Community. She has worked as a consultant to international organizations and companies working on World Heritage projects.

Jessica Brown

Jessica Brown is executive director of the New England Biolabs Foundation and has extensive experience with community-based conservation globally. She chairs the Protected Landscapes Specialist Group of IUCN's World Commission on Protected Areas, and the board of Terralingua, and is co-chair of the Global Conservation Program of the Biodiversity Funders Group.

We acknowledge the wisdom and experience of many colleagues, workplaces, communities, and friends that have influenced our work. In particular, we express our gratitude to the group of "critical friends" who took the time to review this work in draft form.

If you have read and applied this Practice Note—either in full or in part—we would love to hear from you. For example:

- Was the structure we outline in Part 4 easy to understand?
- What was your experience of using the steps?
- What worked well?
- What were some of the challenges?
- What improvements could be made?

We thank you in advance for any feedback that you provide.

We identify as the Heritage Octopus Collective. Contact us: Naturecultures.practicenote@gmail.com