



# **CONNECTING PRACTICE AT THE PETROGLYPHIC COMPLEXES OF THE MONGOLIAN ALTAI**

**Defining new methods and strategies to support  
Nature and Culture through engagement in the  
World Heritage Convention**

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## Terms Used in this Report: Meanings and Commentary

How we talk and write about the interconnected character of Nature-Culture is an important part of the Connecting Practice Project. Here we provide some explanation of the terminology that the principal authors have considered in preparing the report. The explanations are based on understandings developed through working together in the field and during the preparation of the report. They are cast within an understanding of the interrelated social, cultural and natural aspects of the of biocultural landscapes. **Some of the meanings are not necessarily official representations endorsed by IUCN or ICOMOS.**

**Attributes:** Tangible features or intangible aspects of a place.

**Biocultural heritage:** Biocultural heritage is the cultural heritage (both tangible and intangible, including customary law, spiritual values, knowledge, innovations and practices) and biological heritage (diversity of genes, varieties, species, ecosystems) of humans, which are inextricably linked through the interaction between humans and nature over time and shaped by their socio-ecological and economic context (International Society of Ethnobiology 2006).

**Biocultural landscape:** Landscapes in which natural and cultural diversity are inextricably linked or entangled. (For a good overview see: Brosius and Hitchner 2010). Synergies exist with socio-ecological systems theory in the sense that when all qualities of the landscape and the people living therein are considered as connected or entangled and this provides an insight into the biocultural resilience of a landscape (Verschuuren et al. 2014).

**Bottom up approach** (in management planning): A bottom-up approach is one that works from the grassroots - from a large number of people working together, enabling a decision to arise from their joint involvement. In the case of protected area management it implies a planning approach based on the collaboration, and collaborative decision-making, of local people and management.

**Conservation:** There are many understandings of “conservation” (Adams 2005) depending on the field of practice that it is applied too. In this report conservation can mean the protection of nature, particularly as biodiversity and through protecting the places in which it is found. In heritage and archaeological fields conservation may relate to range of practices and techniques to protect the authenticity and integrity of in/tangible elements, artefacts or – as in the context of this report – rock art.

**Conservation practice** In addition to the broad term “conservation”, conservation practice means a set of on-ground measures undertaken to protect in situ cultural and natural heritage. Conservation practice, or hands-on conservation, necessitates the need for specialist skills to carry out systemic documentation, assessment and management in line with international practice.

**Cultural Landscape:** Cultural properties that represent the combined works of nature and of people (World Heritage Convention 1972: Article 1). For the purpose of World Heritage, cultural landscapes are divided into three categories: designed landscapes, organically evolved landscapes (relict or continuing) and associative landscapes (UNESCO 2013, Annex 3).

**Cultural significance:** Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance may change over time and with use. (Australia ICOMOS Burra Charter 2013)

**Experts and expertise:** Expertise means high-level skill or knowledge in a particular field or activity. Expertise can be held in many different ways – e.g., in relation to heritage management, wildlife management, protected area management, and the management of domesticated stock. In this report we recognise knowledge and skill to be distributed amongst different people and communities who contributed to the Connecting Practice Project (e.g., nomadic herders, NGOs such as WWF, IUCN and ICOMOS, government officials, project team members).

**Entanglement:** A term used to resist conceptual binaries, common in Western ontology, such as nature and culture, tangible (or material) and intangible (immaterial), past and present. To be entangled is not simply that separate entities (e.g., people, places, things) or concepts (e.g., nature, culture) interact and are intertwined, but rather signifies the emergent mutual constitution of entities and concepts through intra-active processes.<sup>1</sup> Put more simply, entanglement means nature-culture is inseparable because in any given landscape it is co-constituted.

**Herder nomads:** Refers to communities whose primary economic, social, and spiritual livelihoods are practiced through mobile pastoralism.

**Heritage:** Heritage is a complex term with multiple meanings. For the purpose of this report we use the term to mean a practice of caring for the places or landscapes (with their associated meanings and traditions) that global, national and local societies want to keep.

**Outstanding Universal Value:** Means cultural and/or natural significance, which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. (UNESCO 2013, Paragraph 49)

**Protected Area:** A protected area is a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values (IUCN Definition 2008). The Convention on Biological Diversity offers the following general definition: 'Protected area means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives.'

**Protected Area categories and governance types:** The IUCN protected area category system recognizes six categories and four governance types classified according to management objectives. These Protected Area categories and governance types (Dudley 2008) do not encompass all the ways that World Heritage properties can be designated.

**Rock art and “rock markings”:** The removal by humans of part of a rock surface by, for example, incising, pecking, or abrading. Throughout this report we use the term “rock art” (as well as petroglyphs and rock engravings) because it is a term widely used by ICOMOS and in World Heritage contexts. However, we recognise that the term ‘art’ privileges an assumed aesthetic purpose for production, which is not inclusive of the

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<sup>1</sup> ‘To be entangled is not simply to be intertwined with another, as in the joining of separate entities, but to lack an independent, self-contained existence. Existence is not an individual affair. Individuals do not pre-exist their interactions; rather, individuals emerge through and as part of their entangled intra-relating.’ (Barad 2007: ix)

possible range of motivations for the production of engravings or paintings on rock surfaces. We prefer the term “rock markings”, though use the term sparingly in the report, because it can include images produced many thousands of years ago (e.g., representations of extinct animal species) as well as recent markings (e.g., names and dates of visitors; recent copies of older images), regardless of intention or cultural heritage significance.

**Shared learning:** We use this phrase in preference to terms such as education and training since we find the latter terms typically emphasise a one-way flow of knowledge, power, and skills from one group (often self-defined as “expert”) to another group. Shared learning recognises interactions between groups are always opportunities for mutual knowledge exchange (Lauber et al. 2011).

**Spiritual significance:** The IUCN Cultural and Spiritual Values Specialist Group uses the following meaning - Spiritual significance refers to the transcendent or immanent significance that human-made and natural features have that allow people to connect with a reality greater than themselves and that gives meaning and vitality to their lives and motivates them to revere and care for life and creation.

**Values:** In the field of cultural heritage practice a value is ‘a set of positive characteristics or qualities’ (Mason 2002: 27) and a culturally ascribed meaning or quality attributed by individuals and cultural groups to a heritage object, place or landscape. Places may have a range of values for different individuals or groups. Typically in cultural heritage practice, a ‘thresholds-based values approach’ is used to identify, assess and prioritise aesthetic, historic, scientific, social or spiritual values. In the field of protected area management, a range of value classifications are applied (e.g., Kettunen and ten Brink 2013; Lockwood 2006) that make distinctions between the “intrinsic value” of biodiversity and geodiversity and socio-economic values. In nature conservation intangible values (such as cultural, spiritual, and sacred values) have long been disregarded or ignored but they are of particular importance when developing biocultural conservation approaches (Verschuuren 2012).

### Acronyms

BP	Before Present. A Western dating scheme based on linear time.
FPIC	Free and Prior Informed Consent
ICOMOS	International Council on Monuments and Sites
IUCN	International Union for the Conservation of Nature
SNS	Sacred Natural Site
TOR	Terms of Reference - as set out in the Connecting Practice Project brief
WH	World Heritage
WHC	World Heritage Convention
WWF	World Wildlife Fund



**Figure 1. Rock Art in the Mongolian Altai**

Photo credit: Bas Verschuuren



## 1 Introduction

The Connecting Practice Project aims to explore, learn, and create new methods of recognition and support for the interconnected character of the natural, cultural and social value of highly significant land and seascapes and affiliated biocultural practices (Annex 1).

The project is a joint initiative between IUCN and ICOMOS providing the opportunity for exploring how to form a more genuinely integrated consideration of natural and cultural heritage under the *World Heritage Convention* – “bridging the divide” that is often observed between nature and culture – overcoming the many unintended adverse outcomes that can result.

In the context of this broader project, the authors of this report undertook fieldwork in Mongolia between the 11th and the 21st of October 2014. The Mongolian case study of the Connecting Practice Project yielded insights and lessons concerning the interconnectedness of nature and culture in relation to the World Heritage listed property *Petroglyphic Complexes of the Mongolian Altai*; and the larger biocultural landscape in which the property is embedded.

This report discusses terminology we found useful in conceptualizing and applying a particular biocultural approach to the case study, including terms such as “biocultural landscapes”, “entanglement”, “herder nomads” and “rock art/markings”. Boxes with information on specific topics such as “the Mongolian administrative system”, “Nomadic culture and grazing” as well as “Rights-based approaches to conservation and World Heritage” are inserted in the report.

The findings and suggestions provided in the report are based on the fieldwork experience, analysis of the information provided to us by our hosts in Mongolia, and a brief literature review (see bibliography). We formulated the findings in a manner that is cognizant of the objectives of this study whilst adopting a biocultural approach that is inclusive of local community rights and values.

## 2 Objectives

The objectives for the fieldwork, on which this report is based, reflect the terms of reference (TOR) provided to the Connecting Practice Project fieldwork team:

- Explore the relationships between the cultural values that supported the inscription of the property on the World Heritage List and other significant cultural and natural values, including considerations of the cultural value of nature and how cultural systems help or are necessary to sustain natural values;
- Identify the natural features and values upon which the cultural values depend and how they are interconnected;
- Provide an understanding of local perspectives on the “entangled” dimensions of the biocultural landscape and the interconnected character of the natural, cultural and social values of the property;
- Explore how traditional and conventional/legal management approaches could be reinforced if based on a multidimensional understanding of all the values of the properties,
- Summarise the challenges encountered throughout the fieldwork and when writing the report and suggest ways in which the preparation and implementation of future joint fieldwork could be improved.

These fieldwork objectives fit into the objectives of the overall Connecting Practices project (Annex 2), which are:

Short term objectives:

- Take a local-global learning approach engaging in three contrasting landscapes/seascapes – selected to be regionally diverse, representing different stages in the World Heritage designation and management process – to ensure that lessons are credible, workable and robust.
- Explore and define practical strategies to deliver a fully connected approach to considering nature and culture in the practices and institutional cultures of IUCN and ICOMOS, in order to deliver advice that will achieve better conservation and sustainable use outcomes that reflect the perspectives, interests and rights of custodians and local communities.

Long term objectives:

- Influence a shift in conceptual and practical arrangements for the consideration of culture and nature within the implementation of the World Heritage Convention, and to engage new actors in promoting positive results for conservation and communities.
- Establish new and stronger partnerships with organizations that are already engaged in World Heritage and are taking biocultural and community-based approaches to sustainable development - and support these partners to multiply results through their wider programmes, with States Parties and within the meetings of the World Heritage Convention.

### **3 Approach to the work and some limitations**

Team members undertook the Mongolian field project in late autumn (October) and immediately prior to the onset of winter. We did not experience the World Heritage property at other times of the year. This factor influenced our perspectives on the issues identified, and thus the information we sought from interviews, field interactions, and literature.

We are also aware that our very short field visit provided a good but not necessarily complete overview of issues and especially did not allow for developing experience and relationships with people in the field needed to deliver (scientifically) tested and robust results. As such we view this work as an exploratory learning mission, which can serve as an impetus for further exploration and consideration of new and innovative approaches to better interconnecting nature-culture in World Heritage processes.

Not all of the team members are experts on the processes and workings of World Heritage documents, processes, and practices. At times this served as an asset – it enabled us to think freely about broader heritage values, beyond Outstanding Universal Value (OUV), of the *Petroglyphic Complexes of the Mongolian Altai* and the broader biocultural landscape contexts of the property. Our ranges of knowledge concerning World Heritage also complicated our capacity to identify potential synergies or conflicts in World Heritage processes and the integration of nature-cultures. This is a specific issue when arguing for the adoption biocultural and community-based approaches, their consequences for on-ground management practice, and the recognition of significant non-OUV values of the property.

## 4 Background to the listing of Petroglyphic Complexes of the Mongolian Altai

### 4.1 The Nomination Dossier (January 2010)

The property, *Petroglyphic Complexes of the Mongolian Altai*, was nominated to the World Heritage List in 2010. The nominated property comprised a serial nomination of three component parts (or site complexes) - Aral Tolgoi, Upper Tsagaan Gol, and Tsagaan Salaa-Baga Oigor - located in the province of Bayan-Ulgii, in the Altai Mountains of western Mongolia. The Nomination Dossier argued that the inter-related site complexes represent 'extraordinary repositories of petroglyphic rock art' that 'function as cultural landscapes in which rock art, surface monuments, and the larger physical context are deliberately and expressively integrated'. It concluded that the three site complexes comprise one of the largest, oldest, and least damaged concentrations of rock art in central Asia.

The main attributes argued to support the inscription were:

- Number and "quality" of rock art. Collectively the three site complexes contain more than 10,000 compositions with each composition including from one to 100 images' (Mongolian National Commission for UNESCO 2010: 14-18).
- Time range represented by the rock art. The rock engravings represent a time range extending from the late Pleistocene (c. 11,000 BP), through the early and middle Holocene (c. 11,000-6,000 BP), Bronze Age (c. 4,000-2,800 BP), Early Iron Age (c. 3,000-2,000 BP) and Turkic-Medieval Period (700-900 AD).
- Association of rock art and 'surface monuments' ('ceremonial and funerary mounds'; Mongolian National Commission for UNESCO 2010: 14, 57). See Table 1.
- Physical context (settings) of the three site complexes. Aral Tolgoi and Upper Tsagaan Gol are located in valleys of the Altai Mountains, while Tsagaan Salaa-Baga Oigor is located within a region of high mountain steppe.

The property was nominated under cultural criteria (i), (ii) and (iii); no natural criteria were considered.

### 4.2 The ICOMOS Evaluation

The ICOMOS Evaluation categorised the property as a serial nomination of three cultural landscapes. No category of cultural landscape (i.e., designed, organically evolved, or associative) was suggested for the property in the evaluation report.

ICOMOS' evaluation considered that:

- the serial approach was justified and that the selection of sites was appropriate;
- the nominated property meet criterion (iii) and conditions of authenticity and integrity and that Outstanding Universal Value had been demonstrated;
- the boundaries of the nominated property and of its buffer zone were adequate;
- the legal protection in place was adequate to deflect most threats;
- the monitoring of the conservation indicators needed to be put into practice.

Nevertheless, ICOMOS Evaluation recommended that nomination be *deferred* in order to allow the State Party to:

- Put in place a database system for the property, and a timescale for populating this database though assembling the existing material for the sites, and for

- undertaking any further work that may be needed to gain an overview of the images clusters;
- Put in place a management authority for the three sites as a means of implementing the Management Plan; and ensure adequate resources for its implementation;
  - Provide assurance that mining will be banned in the nominated areas and their upstream hinterland;
  - Provide assurance that illegal road building activities will be stopped.
  - Extend the Altai Tavan Bogd National Park to cover all of the three nominated sites.

### 4.3 The World Heritage Committee Decision

At the 35<sup>th</sup> session of the World Heritage Committee, held in Paris, the Committee **inscribed** the *Petroglyphic Complexes of the Mongolian Altai* (Mongolia) on the World Heritage List on the basis of criterion (iii) (Committee Decision 35 COM 8B.28). The Committee, however, recommended that the State Party give consideration to pointed in ICOMOS evaluation, namely:

- a) Establishing a database system for the property, and a timescale for populating this database through assembling the existing material for the sites.
- b) Ensuring the effective implementation of the management plan for the three sites.
- c) Extending the Altai Tavan Bogd National Park to cover all of the three nominated sites.
- d) Assuring that mining will be banned in the inscribed areas.
- e) Assuring that illegal road building activities will be stopped.

### 4.4 Justification for the inscription of the *Petroglyphic Complexes of the Mongolian Altai* on the World Heritage List

While the State Party argued for the inscription of the *Petroglyphic Complexes of the Mongolian Altai* under three World Heritage cultural criteria – (i), (ii), and (iii), the ICOMOS Evaluation argued that it met criterion (iii).<sup>2</sup> The World Heritage Committee agreed with this evaluation, providing the following justification (see Annex 3 for the complete Statement of Outstanding Universal Value):

**Criterion (iii):** The *Petroglyphic Complexes of the Mongolian Altai* provide an exceptional documentation of the pre-historic and early historic communities in the northwestern Altai Mountains, at the intersection of Central and North Asia. The petroglyphic imagery includes animals such as mammoths, rhinoceros, and ostriches, executed in static profile contours. These animals inhabited North Asia when the region was significantly colder, drier and covered by rough grasses and forbs rather than forests. By the end of the Late Pleistocene (ca. 11,000 BP), the dry steppe was gradually being replaced by the forested environment of the Early Holocene (ca. 11,000 – 6,000 BP). This period is reflected in majestic images of elk, aurochs, and ibex, executed in profile silhouettes. There are very few sites in North Asia that include pre-Bronze Age petroglyphs in such number, variety, and quality.

This justification for criterion (iii) focuses exclusively on rock art, and no mention is made of the connected attributes described in the Nomination Dossier – the associated “surface monuments” and sacred mountain. Furthermore, the justification describes the

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<sup>2</sup> (iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared (UNESCO 2013: Article 77).



connections between deep time human presence and climate change, which serves to illustrate connectivity between people and changing environments. In Table 1 we present a summary of these interconnections as they are important in conceptualising linkages across nature-cultures.

The authors believe that this justification leans heavily on art history and environmental determinist perspectives. This is not intended as a criticism of the nomination process, but rather acknowledges that it focuses on those aspects of the property considered to have Outstanding Universal Value, which is not exclusive of the importance of other values. The art history perspective emphasises the aesthetic quality and skill involved in the creation of the rock art. The environmental determinism perspective views the changing environment as the primary causal agent of change in human occupation and settlement patterns. We recognise the importance of these narratives for listing the sites as a World Heritage property but we also see space for continuing the explorations of narratives that are more complementary in investigating the interconnected character of cultural, natural and social values.

**Table 1. Correlations between paleo-environments and evidence for human presence.** This correlation includes changing rock art styles.

(Primary source: Mongolian National Commission for UNESCO 2010: 11-13)

<b>Date (BP)</b>	<b>Paleo-environment</b>	<b>Evidence of human presence</b>
40,000-30,000		Earliest documented human presence.
18,000 – 11,000	Late Pleistocene. Cold dry climate. Steppe vegetation	Earliest rock art: mammoth, auroch, horse, elk, argali sheep, ostrich (“static realism style”).
11,000 – 6,000	Early and mid-Holocene. Wetter warmer climate. Expansion of forests	The production of rock art in this period is unknown.
5,000	Mid-Holocene. Drying trend. Retreat of forests.	Rock art: auroch, elk, ibex, simple human figures.
4,000 – 3,000	Late Holocene. Re-establishment of cold climate and dry mountain steppe.	Bronze Age. Rock art: includes group hunting, wheeled vehicles, domesticated yak, “spirit figure”. Burial mounds, <i>Khirigsuur</i> , standing stones, stone circles.
3,000 -2,800	As above	Late Bronze Age. Transition to horse-dependent nomadism. Rock art details weaponry and dress. Appearance of stylized stag motif. Addition of “deer stones” with deer images, human faces, belts, weapons.
2,800 – 2,000	Late Holocene.	Early Iron Age. Full horse-dependent nomadism. Rock art dominated by scenes of hunting and riding (“stylized realism”). Rows of burial mounds with associated platforms and rows of stones ( <i>balbal</i> ).
700 – 900 AD	Late Holocene.	Turkic Period. Rock art dominated by warrior and horse images, with rare runic inscriptions. Square platforms (enclosures), rows of stones ( <i>balbal</i> )

		and carved image stones (facing east).
c. 1800 - present	Anthropocene.	Khazak nomad herders (Muslim) occupy Mongolian Altai. Summer and winter camps, crop enclosures, <i>ovoo</i> and Buddhist stupa. Rock markings: names, dates, copies of earlier images.

## 5 Situating the Petroglyphic Complexes of the Mongolian Altai within the broader landscape

The three separate component parts (or site complexes)– Aral Tolgoi, Upper Tsagaan Gol, and Tsagaan Salaa-Baga Oigor – that comprise the the serial nomination of the *Petroglyphic Complexes of the Mongolian Altai* are located in the Ulaankhus and Tsengel districts (Soum) within the province (Aimag) of Bayan-Ulgii and the Altai Mountains region of western Mongolia. (Figures 1 and 2; Box 1)

**Figure 2. Location of Petroglyphic Complexes of the Mongolian Altai (green dot)**



### 5.1 Altai Tavan Bogd National Park

Of the three site complexes that make up the *Petroglyphic Complexes of the Mongolian Altai*, one (Aral Tolgoi) is wholly within the Altai Tavan Bogd National Park (and within a border military area), one (Upper Tsagaan Gol) is partly in the park and partly in the buffer zone, and one (Tsagaan Salaa-Baga Oigor) is wholly within the buffer zone. (see Figure 2).

Altai Tavan Bogd National Park is located in Bayan-Ölgii Aimag (Province), western Mongolia, and borders Russia and China. The park is 636,300 hectares in area. It includes the Tavan Bogd Mountains, which include the five highest mountains in Mongolia. The highest is Khuiten Uul (4,374m). The mountains are considered sacred to local Tuvian and Kazakh people. The national park includes glaciers, three large lakes, endangered fauna (e.g., argali sheep, ibex, grey wolf, snow leopard, red deer, golden eagle, black vulture, Altai snowcock), extensive areas of larch forest, and a large number

and diversity of cultural sites (e.g., rock art, standing stones, burial mounds, ritual places, cemeteries, nomad herder settlements, and stock enclosures). Tourist numbers are generally low (1,500 in the current season) and park entry fees for tourists are minimal (3,000 TRG or US \$1.60 per entry, not per day).

The park is occupied in summer by nomad herders (mobile pastoralists). In some cases their camps adjoin areas with rock art, including the World Heritage site complexes. It is estimated that 700 families reside in the park during the summer. Most are Kazakh (generally Muslim) and Tuvian people (generally shamanistic and Buddhist). Animals brought in and out of the park are sheep, goats, cattle, and yaks (camels are rare due to the increasing use of trucks for transporting camps from summer to winter locations and vice versa). Hay, for winter feed, is grown in small fenced enclosures near the summer camps. Dung is collected and dried for use as a fuel for heating and cooking.

**Figure 3. Topographic map of Bayan-Ulgii, province, western Mongolia: World Heritage property (red) and Altai Tavan Bogd National Park boundary (purple line)**



Altai Tavan Bogd National Park is classified as an IUCN Category II protected area.<sup>3</sup> Key objectives of the current park management plan are: (1) to protect glaciers; (2) to

<sup>3</sup> 'Large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.' Available at <



protect flora and fauna; and (3) to protect culture and historic heritage. To achieve these objectives, the national park is divided into three zones or precincts: a core zone (the most westerly and includes the glaciers); a tourist zone; and a limited use zone (the most easterly). Nomad herder summer camps are located in the tourist and limited use zones. In addition there is a wide buffer zone on the eastern side of the national park in which are located nomad herder winter camps. A wolfram mine is located in the buffer zone.

### Box 1: The Mongolian administrative system.

The Mongolian administrative system is a three-level system composed of Aimag, Soum (or Sum), and Bag. The system was originally established by Chinggis Khan who united Mongolia in 1206 and conquered much of China and central Europe. After 1691 Mongolia became part of China and as Buddhism gradually gained ground it was incorporated in the administrative systems (Bruun & Odgaard 2013). During the Russian communist era between 1921-1992 it attained its current form.

Aimag - Province  
Soum – Districts  
Bag – Sub-district

Under the national level the Aimag represents the province, of which there are 21 in Mongolia. The Aimags are divided in Soum or districts and the Soums into Bags. The Bags typically consist of around 200-300 herder families depending on the size of Soum or district. The Bag is an administrative layer in which traditional knowledge, governance, and management systems play an important role in shaping the biocultural landscape

The Mongolian-Altai Range Special Protected Area Administration (of which Mr. Atai is the current Director) administers the national park. Parts of seven Soum (districts) extend over the national park. The park employs 15 rangers, all of whom live within the park boundaries. Their functions are to: (1) communicate with local people; (2) monitor natural and cultural heritage; and (3) law enforcement. There are three Mongolian Border Stations located within the park. There are a number of agreements that have been developed in relation to the management of the park (e.g., a “Three-Party Agreement” between the Soum governor, nomad herders, and park administration for use of pasture inside the park; an agreement with border guards; and agreements with other countries regarding wildlife management). Key issues in park management include: nomad herder stocking rates and determining carrying capacity (for inclusion in license agreements); understaffing and the need for cultural heritage expertise; a capacity to create a cultural heritage inventory for the park; the need for greater levels of shared learning between the park administration, nomad herders, border guards, and Soum governor; and certified guides for tourists.

It is the authors’ understanding that there is a long-term proposal to transfer increased levels of control and management of the national park from the Special Protected Area Administration to local nomad herders. Since we are unclear on the nature and likelihood of this proposal, and any possible changes in governance arrangements, we only mention this possibility here. However, we suggest that an implication of such an

approach, if implemented, is that park management objectives would then become better aligned with Category VI rather than Category II protected area.

## Box 2: Rock art sites of central Asia: contextualising the Petroglyphic Complexes of the Mongolian Altai

The rock art of Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, as well as South Siberia in Russia, Mongolia and other adjacent areas in the region) represent centuries-old traditions of image-making activity by ancient and contemporary peoples (ICOMOS 2011). The history of the rock art of Central Asia is notable for the fact that once emerged the practice of rock engraving was maintained despite changes in environments, economic systems, ethnics, ideologies, and national boundaries. Though the rock art motifs had fluctuating forms, ideological content, social functions, and personal and collective meanings, the tradition of rock marking was a cultural tradition that persisted; the images depict lifeways and landscape connections carved in stone. Hence the rock art assemblage of the central Asia region represents an outstanding example of evolving cultural values, ideologies, and cosmologies of deep time and modern peoples, whose thousands-of-years-history evolved across a geographical span from the Aral and the Caspian to Altai and Tian-Shan, from the South Ural to Pamir and Copetdag Range.

Rock art – markings spatially fixed in the landscape – were created within specific natural and cultural contexts. Rock markings, along with other connected archaeological features (e.g., settlements, burial grounds, altars, modern infrastructure), reflect the presence of ancient and contemporary communities in the landscape, their relation to the environment, the functional significance of different built and engraved features, and varying degrees of technical sophistication in the production of rock art.

Each rock art site and complex in central Asia is located within broader landscapes containing humanly created features, such as traces of habitation (structures and objects) and evidence of social (including religious) activities and modern landscape intrusions (buildings and infrastructure). Rock art locations are almost always associated with built structures, which reflect the deep time and contemporary character of human habitation and human interaction with the environment. Some rock art assemblages, and their associated built features, can be characterised, in World Heritage cultural landscape terms, as *relict* (archaeological or paleo-cultural) *landscapes*. Interpretations of the role of past rock art making traditions can be undertaken by studying space-and-time and functional relations of the rock art to other monuments and their broader natural-cultural landscape contexts. Rock art traditions can also be part of *continuous landscapes* with contemporary *living traditions* (i.e., creation of new markings and/or renewal of ancient drawings; veneration of their locations) and therefore subject to ethnographic study. In many places there is a process of cultural renewal taking place in which contemporary communities are revitalising their knowledge and interactions with ancient rock art sites. Thus studies of spatial, time, and functional relations of ancient rock markings to other archaeological features and/or live traditions are an important part of contemporary research in central Asia (Рогожинский 2011).

**Figure 4. Discussing the zoning plan for Altain Tavan Bogd National Park**  
Photo credit: Bas Verschuuren



## 6 Rock art: context and documentation

In this section of the report we briefly outline the nature of rock art in central Asia (and thus contextualise the *Petroglyphic Complexes of the Mongolian Altai*) and reference standards for documentation of this body of heritage.

### 6.1 Context

In 2011, ICOMOS published a thematic study on rock art in central Asia (ICOMOS 2011). The study comprises eight papers on different regional assemblages of rock art, and includes a paper by Esther Jacobson-Tepfer on *The Altai Mountains of Northwest Mongolia*. The paper contains summaries of information concerning the rock art of the three component parts that form the World Heritage property – Aral Tolgoi, Upper Tsagaan Gol, and Tsagaan Salaa-Baga Oigor (ICOMOS 2011: 115-118). The documentation undertaken at these sites is extensive. There are more than 34,000 photographs stored at the University of Oregon and 3,800 drawings stored at the Institute of Archaeology and Ethnography, Novosibirsk; as well as GPS and GIS documents for each of the site complexes.

Box 2 contextualises the *Petroglyphic Complexes of the Mongolian Altai* in relation to the rock art of central Asia, drawing principally on the ICOMOS thematic study.

## 6.2 Documentation

In this section we provide a brief outline of a process for management and conservation of rock art (Figure 4). It draws on the experience of one of the authors (Rogozhinsky) at the archaeological landscape of Tamgaly, Kazakhstan, (Rogozhinsky 2011) and reflects current practice in rock art conservation undertaken generally in central Asia. We include this information because it forms a useful background to issues of rock art management and protection.

Documentation of rock art sites requires more than mapping, drawing, and photographing of rock art images (though these are necessary recording processes) because rock art is not simply concerned with only the rock surfaces with humanly created markings. Rock art sites are part of and situated within broader landscape contexts. These cultural landscape contexts comprise many forms of humanly-made features and landscape modifications that bear witness to past human presence, activities, and environmental transformations. Accordingly, the documentation of a rock art site complex requires systemic recording and documentation in order to represent the layering and spatial-temporal landscape changes. Both cultural elements (e.g., through archaeological and ethnographic methods) and natural elements need to be documented in this process.

Figure 4 is drawn from a publication titled *Documentation Standard for Rock Art Sites of Central Asia* (Рогожинский et al. 2004). This documentation standard was developed between 2003 and 2005 by a collective of international specialists within the framework of a regional UNESCO project titled *CARAD: Central Asian Rock Art Database* (Рогожинский et al. 2004: 157). The documentation standard was supported by specialists from central Asian countries, including Alexey Rogozhinsky – an author of this report and a participant in the Mongolian fieldwork. The documentation standard has been applied to landscapes with rock art on the World Heritage List. These include: Tamgaly, Kazakhstan (inscribed 2004); Gobustan, Azerbaijan (inscribed 2007); and Suleiman-Too, Kyrgyzstan (inscribed 2009).

Figure 4 shows the four structural and spatial levels at which documentation is required to represent the rock art at any one site complex. The levels are:

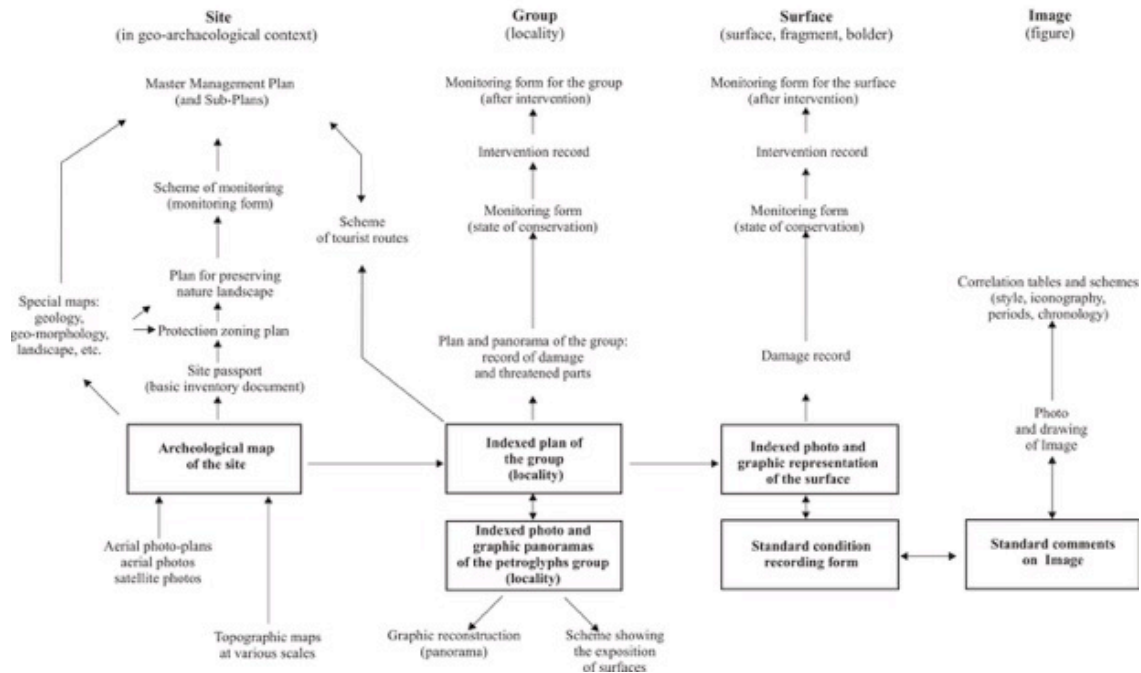
- Site / Complex (a landscape with inter-related archaeological features).
- Group (a spatially and topographically contained set of archaeological elements).
- Surface (a single rock surface with one or more motifs).
- Image (a single motif or figure).

Each of the four levels has documentation requirements. The documentation assembled for each level, in addition to being a record and research resource, is necessary to inform management decision-making processes with respect to conservation, protection, monitoring, interpretation, public access, location of facilities, etc. This system is underpinned by a belief that a full corpus of documentation for each of the four levels is necessary to reflect and manage the integrity of a rock art site complex.

Finally, we note that the ICOMOS Evaluation and World Heritage Committee decision (mentioned in Section 4) recommended that a database system for the *Petroglyphic Complexes of the Mongolian Alatau* be established and a timeframe for populating the database be determined. It is clear from our reading that the three component parts that comprise the World Heritage property have been the subject of an enormous level of documentation as described in the ICOMOS thematic study of central Asian rock art (ICOMOS 2011: 115-118). We therefore understand the issue to be one of the holding

institutions (University of Oregon and Institute of Archaeology and Ethnography, Novosibirsk) providing copies of the documentation (photographs, drawings and GIS maps), where they have not been provided, to the State Party (Mongolia) for the purpose of future management.

**Figure 5. Planning chart for rock marking management and conservation. Source: Documentation Standard for Rock Art sites of Central Asia (Рогожинский et al. 2004)**



## 7 Discussion: Biocultural landscapes and the interconnected character of cultural, natural, and social values

In this section we address five points outlined in the Terms of Reference (TOR) for the field study (Annex 2). The section has been written with reference to the reasons that the property was inscribed on the World Heritage list (Sections 4 and 5 of this report) and what defines its Outstanding Universal Value (see Annex 3 for the Statement of OUV).

The discussion is presented at three levels: first, specifically in regard to the three component parts (or site complexes) that form the *Petroglyphic Complexes of the Mongolian Altai*; second, the wider setting of these sites which we take to be the Altai Tavan Bogd National Park and its buffer zone (though could equally be taken to mean the whole of the Altai Mountains); and, third, the context of this study, being the Connecting Practice Project. Throughout this section we preference the term ‘rock markings’ over ‘rock art’ thus we will use the term rock art/markings. (See Terms used in this report)

### 7.1 How cultural systems sustain nature

TOR 1: Explore the relationships between the cultural values that supported the inscription of the property on the World Heritage List and other significant cultural and



*natural values, including considerations of the cultural value of nature and how cultural systems help or are necessary to sustain natural values.*

### 7.1.1 Other significant cultural and natural values

By 'other' values, we are referring to those cultural and natural values of the *Petroglyphic Complexes of the Mongolian Altai* that are not the focus of the justification of Outstanding Universal Value (OUV). Other values can be summarised under three main groups:

1. **A broad range of natural values** (geological and ecological). Parts of the Altai Mountains – the *Golden Mountains of Altai* (Russian Federation) – have been included on the World Heritage List under natural criterion (x).<sup>4</sup> In addition, China has included *China Altay* on its Tentative List under natural criteria (vii), (viii) and (ix).<sup>5</sup> These various listings point to the importance of the natural values in the wider Altai region.
2. **Large number and diversity of cultural features.** From our short field visit, it is evident there is a large number and diversity of cultural features that extend beyond the three inscribed rock art site complexes. These features include:
  - a. Additional rock art/marketing sites.
  - b. Areas (in particular the high mountain valley floors) with large numbers and a diversity of surface monuments (*khirigsuur*,<sup>6</sup> standing stones (some sculpted), stone circles, etc.). Some of these features were mapped by Alexey Rogozhinsky during the field work.
  - c. Large number of cultural features, dating to the last 200 years, that evidence occupation of the area by contemporary nomad herders – settlement locations (e.g., summer and winter camps, enclosed fields, enclosed natural springs) and cemeteries.
  - d. A large number of sacred (natural) sites used for spiritual activity such as the sacred mountain of Shiveet Khairkhan, *ovoo*, and a Buddhist stupa. Shiveet Khairkhan is contained within the boundary of the Upper Tsagaan Gol site, but is not specifically recognised for its sacredness in the inscription on the World Heritage List (Annex 3). The mountain is linked with other sacred mountains and subject to traditional forms of spiritual practice and governance – for example, non-hunting of Ibex and Argali sheep by local nomad herdsman.
3. **A deep-time and continuing tradition of nomad herding.** Mobile pastoralism is likely to have been practiced in this region for almost 4,000 years (e.g., evidenced in Bronze Age rock markings). Despite the changing ethnic composition of nomad herders over this time, the tradition

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<sup>4</sup> (x). Contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation. (UNESCO 2013: Article 77)

<sup>5</sup> The tentative list for China is available at: <http://whc.unesco.org/en/tentativelists/5533/>. A Tentative List is an inventory of those properties that each State Party intends to consider for nomination.

<sup>6</sup> "Khirigsuur" refers to a specific type of "kurgan" whose central boulder mound is surrounded by a concentric arrangement of stone fences, satellite mounds, and hearth circles.' (Fitzhugh 2009: 185).

can be said to be continuous and continuously adapting (e.g., evident, since 1990, in the rapid uptake of technology such as motor bikes, trucks, satellite dishes, solar panels, and computers). Associated with mobile pastoralism are locally specific knowledge, skills, and practices (e.g., eagle hunting, possibly a practice with a more-than-2,000 year history). We also recognise that there is a relatively new phase of rock marking taking place amongst nomad herders, most evident at the part of the Tsagaan Salaa-Baga Olgoi site we visited where names/dates and copies of prehistoric images are evident. The reasons for the renewed practice (e.g., place marking, spiritualism, graffiti) are unclear. It is emphasised that these recent markings are not recognised as one of the attributes of the World Heritage property and neither are we arguing that they should be so recognised.

### **Figure 6. Shiveet Khairkhan Sacred Mountain**

Photo credit: Bas Verschuuren



#### **7.1.2 Relation between values that supported the inscription and other values**

We have suggested that the values for which the property was included on the World Heritage List reflect a strong disciplinary specific focus (i.e., art history, archaeology) (see Section 4.5). We also understand that the major reason for this focus is because there is detailed documentation for the rock art at these sites (ICOMOS 2011; Jacobson, Kubarev and Tseveendorj 2001; Jacobson-Tepfer, Kubarev and Tseveendorj 2006; Tseveendorj, Kubarev and Jacobson 2005), and insufficient documentation on cultural features (e.g., other rock markings, *ovoo*, graves, deer stones) for the wider Altai Tavan Bogd National Park. This is to say that the listing of the *Petroglyphic Complexes of the Mongolian Altai* represents pragmatism rather than holism.

The focus on the well-documented values of rock art as the basis for OUV and World Heritage inscription does not exclude the existence of other significant values (Section

8.1.1).. However, for the purpose of the Connecting Practices Project, and for the purpose of this report, our interest is in all values (cultural and natural) relevant to the management of the *Petroglyphic Complexes of the Mongolian Altai*; and this includes whether or not they exist wholly within or beyond the World Heritage property boundaries.

Table 2 illustrates how the values of the World Heritage property act as a subset of wider biocultural landscape values of the Altai Tavan Bogd National Park (and buffer zone). Thus the values relating to the rock art/markings (quantity, ‘quality’, time range, association with stone features – Section 4.2) and the physical setting of the rock art/markings sites are part of the cultural heritage of the wider national park, its buffer zone and a border zone.

**Table 2. Connections between values that supported the inscription on the World Heritage List and broader biocultural landscape values**

Arrows indicate how values of the rock art/markings sites are aspects of wider biocultural landscape values.

Rock markings values	Biocultural landscape values
Quantity and quality	Natural: geological, ecological Socio-natural: spiritual, aesthetic
Time range	Cultural/historic: tangible evidence (e.g., rock art, stone features, settlements)
Association with stone features	Tradition of mobile pastoralism; 19C-contemporary nomad herder places
Setting (physical context)	

What is most evident from the table is the absence of, or lack of emphasis on, the sustained relationships between the World Heritage property and traditions of mobile pastoralism for the region and with contemporary nomad herder lifeways. We suggest, for example, that this relationship is evident with regard to the locally sacred mountain, Shiveet Khaikhan, which lies within the boundary of the Upper Tsagaan Gol site. The mountain is locally sacred to Buddhists and to practitioners of shamanism, and there is physical evidence of this on-going connection in the form of *ovoo* and a stupa. We see challenges for the national authorities, and local protected area managers in managing well-documented rock art alongside other less-well documented cultural features.

It is our finding that there is a n unexplored relationship between the values that supported the inscription on the World Heritage listing of the *Petroglyphic Complexes of the Mongolian Altai* and other values. The absence of adequate documentation (archaeological, ethnographic, ecological) is the major limiting factor in connecting these value sets and in determining their levels of significance.



### 7.1.3 Cultural systems and nature

As we discuss below, we adopt a framework of entanglement (see glossary) in our envisioning of biocultural landscapes, rather than viewing cultural and natural systems as separate and capable of being intertwined. However, for the purposes of the current discussion, we would point to a number of ways in which the cultural values of the biocultural landscapes of the Altai Tavan Bogd National Park potentially sustain ecological systems:

1. **Traditional governance.** Although we were not able to verify this, it is likely that a traditional governance system for natural resources may still be in place. We base this assumption on the following observations:
  - Prohibitions by local communities on hunting in areas such as sacred mountains (e.g., Shiveet Khaikhan) and streams that have a heightened spiritual value to people, and
  - Religious, and local beliefs that help regulate the use of natural resources (e.g., hunting prohibitions, the cutting of trees, and use of medicinal plants)
2. **Nomad herder transhumance**, a practice in which most of the national park is unoccupied by humans in the winter months,
3. **Nomad herder knowledge and observation of rare and endangered flora and fauna.** The agreement between nomad herders and the protected area administration draws on this knowledge for monitoring species (e.g., argali sheep, snow leopard, wolves). Similarly such informative collaboration may exist around specific plant species and inform park management about trends in the occurrence of endangered species and pasture quality.

Equally however, there are ways in which contemporary cultural practices may not work toward sustaining ecological systems, but rather may have potentially deleterious ecological impacts if unmanaged and underlying causes left unaddressed.

1. **Overgrazing of native pastures** across areas of high mountain steppe. The issue here appears to be one of stock carrying capacity and not the exclusion of animals. During our visit we observed grasslands following intensive summer grazing (after nomad herders had left their summer camps) and thus before vegetation would naturally regenerate. Because we did not have any base line ecological data on the quality of pasturelands and the impacts of grazing, we are unable to make quantifiable judgements on grazing pressure on the grasslands. See Box 3
2. **The impact of multiple and extensive vehicle tracks** across grasslands in valley floors, which potentially impacts on flora (and thus availability of pasture) and causes both soil compaction and loss of topsoil.
3. **The removal of forest trees** for the construction of nomad herder dwellings and enclosures. While the amount of timber removed (and in particular in areas of Larch Forest) is subject to license agreements, the reality of cutting rates appears unknown to park management. We observed areas where tree cutting had taken place, as evidenced by large expanses of stumps, though distinguishing between past forest practices and contemporary nomad herder activity was impossible for us to recognise.
4. **Erosion of lake edges** likely a result of natural processes and possibly exacerbated by cultural practices (i.e., tree cutting and treadage by domestic stock).

Although the potential ecological impacts associated with cultural practices as described above are only evident to small degrees within the three sites of the *Petroglyphic*

*Complexes of the Mongolian Altai*, they nonetheless represent long-term threats to these places. Thus overgrazing, and hence erosion, by domestic stock is a potential threat to the sites (Box 3). Equally, the multiplication of vehicle tracks (associated with the rapid introduction of technology in nomadic lifestyles such as motorbikes, trucks and cars) in the vicinity of rock art sites, and unsupervised tourist visits to sites, have the potential to impact on the values of rock art sites. What we are pointing to here is the need for a holistic approach to landscape management that considers rock art as well as wider cultural, social and ecological changes. This is an acknowledged goal of the managers of the *Petroglyphic Complexes of the Mongolian Altai* and of the Altai Tavan Bogd National Park.

### Box 3: Nomadism, pasture management, and overgrazing

The Mongolian Steppe, one of the largest remaining grassland ecosystems in the world, is home to a traditional nomadic herding culture that has roamed these steppes for thousands of years. Mongol pastoral culture maintained a careful balance between people, other animals, and ecosystem. It provided sustainable livelihoods to more people than would be possible by any other means of subsistence in the steppe environment. However, since 1990 with the coming of the democratic and capitalist system, the national herd almost doubled to an approximate 45 million head of sheep, goats, yaks, camels, horses, and cattle. Some 70 per cent of the grassland ecosystem is now considered degraded and about 12 per cent of the biomass has disappeared which accounts for 80 per cent of vegetation loss in recent years (Hilker et al. 2014). In the Altai Sayan eco-region alone stock size has increased 1.3 times with the goat herd size doubling in the period 1995 to 2000 (WWF 2014).

## 7.2 How nature sustains cultural values

TOR 2: *Identify the natural features and values upon which the cultural values depend and how they are interconnected.*

### 7.2.1 Natural attributes upon which cultural values depend

In this section we consider the connectivity's between natural attributes/values and cultural attributes/values. Based on our field trip and reading we make a number of observations in regard to the connectivity between the natural environment and specifically humanly created rock art/markings.

1. **Geology, geomorphology and rock art/markings.** There is a strong correlation between the location of rock art/markings with geology (outcrops and boulders of metagreywacke, a fine, hard sandstone) and geomorphology (rock surfaces smoothed, polished, and etched by glacial action) in the Mongolian Altai (Mongolian National Commission for UNESCO 2010: 11). Metagreywacke and granite were also source materials for the construction of stone features and modern nomad herder dwellings.
2. **Topography and rock markings.** *In situ* rock art/markings are predominantly found on hills and ridges (rather than, for example, valley floors) because this is where rock outcrops occur. There are relationships between some hills/ridges and bodies of water (e.g., the large lake Khoton

Nuur lies to the immediate southeast of Aral Tolgoi; the rock art/markings at Upper Tsagaan Gol flank both sides of Khar Salaa [Black River]), but the exact nature of this relationship is unclear. We speculate that there are both pragmatic and cultural/spiritual dimensions connecting rock art/markings locations and bodies of water (for more on this see Kortum 2014).

3. **Paleo-environment and rock art/markings.** Human occupation of the Mongolian Altai underwent 'big' changes in the more than 30,000 years that people have been present in the region (Table 1). Change can be recognised in economic/subsistence practices (e.g., the transition to horse-dependent nomadism after 4,000 years ago), movements and mixing of ethnic groups, social systems, and rock art/markings styles. It is the fieldwork team's view that these changes were not simply a response to climatic and vegetation change (i.e., environmental determinism), but rather a co-evolution (or entanglement) of people and environment. We see the rock art/markings not only as a record of human presence and intra-action with the environment, but as a part of the paleo-environmental record (e.g., the presence of extinct fauna; introduction of non-native species), along with palynological and paleontological evidence.
4. **Sacred natural sites.** A number of mountains in the Altai Tavan Bogd National Park are considered sacred by different communities (e.g., Tuvian, Kazakh, Buddhist). Beliefs about these places can be linked to 'natural' energy forces experienced by people (e.g., see Dobson and Mamyev (2010) for connection between naturally occurring magnetite and 'life force' with respect to a sacred mountain in the Russian Altai). We speculate that some of the rock art/markings reference human engagements with ritual, ceremonial, and sacred places (e.g., Shiveet Khairkhan), though we are not aware of any direct evidence for this.
5. **Human-animal interactions (interspecies relationships).** The rock markings speak to the deep-time relationships between humans and other animal species. While these connections can be seen in purely economic terms (e.g., hunting of wild species; herding of domesticated species), the linkages between humans and other animals also have over-lapping and interlinked spiritual dimensions (e.g., represented in Late Bronze Age rock markings of stylised deer and the occurrence of 'deer stones' [Fitzhugh 2009]). Paula DePriest (2007: 107-108) describes how contemporary 'hunting represents an exchange with spirit masters of animals' and shamanistic ceremonies are conducted at hunting *ovoo* sites in which an exchange is mediated between a 'male shaman and a female animal spirit-master convincing her to give up her animals.' Natasha Fijn (2011) describes contemporary complex human-animal co-existence in Mongolia relevant to the point we make here.

### 7.2.2 Nature and cultural systems

Here we point to how cultural values interconnect with natural features or attributes/ecological systems and in turn may sustain values of the biocultural landscapes of the Altai Tavan Bogd National Park. We emphasise that we regard the natural environment as neither a 'backdrop' to human action and endeavour nor a 'resource' (e.g., water, stone, fauna, flora) 'exploited' or 'offered' as a service in the process of living. Rather we view the environment and humans as mutually constituting. Thus, for example, when nomad herders remove and break-up rock for the construction of dry stonewalls or burial mounds, the local ecology is altered. That is, there is a loss of stone on ridges and hills (and thus a diminution of a particular habitat), but equally the construction of new and different habitat forms on valley floors. Over long periods of

time, there is cumulative ecological change as local environments are continuously modified by human settlement and activities.<sup>7</sup> Hence we privilege a model of co-evolution or mutual constitution over one of interconnectivity in discussions of interdependencies of natural and cultural systems.

**Table 3. Altai Mountains: connecting landforms and land-use.**

The table is a summary based on broad and simplistic categories. The intention of the whole table is to make visible connections between nature-culture systems.

<b>Landform type</b>	<b>Resources</b>	<b>Historic use</b>	<b>Contemporary use</b>
Lakes and rivers and shorelines	<ul style="list-style-type: none"> <li>▪ Water</li> <li>▪ Fish</li> <li>▪ Birds</li> <li>▪ Animals such as Red Deer</li> <li>▪ Forest (e.g., larch)</li> <li>▪ Mosquitos</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fishing/hunting</li> <li>▪ Drinking water for people and animals</li> <li>▪ Ritual use (e.g., based on orientation of ancient burial sites)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Fishing/hunting</li> <li>▪ Drinking water for people and animals</li> <li>▪ Wood for fuel</li> <li>▪ Summer camps above lake shorelines</li> <li>▪ Enclosures (wood) for crops near shorelines</li> <li>▪ Enclosures at natural springs</li> </ul>
Valley floors <i>High mountain steppe</i>	<ul style="list-style-type: none"> <li>▪ Grasses</li> <li>▪ Native fauna – marmot, pike, rabbit</li> <li>▪ Domesticated fauna – cow, horse, yak, sheep, goat, camel</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pasture grounds for stock</li> <li>▪ Stone features (burials, ritual)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pasture grounds for stock</li> <li>▪ Stock provide meat, milk, hides, felt, etc.</li> <li>▪ Pathways and tracks</li> <li>▪ Construction of enclosures</li> <li>▪ Target species for eagle hunting</li> <li>▪ Cow, yak and horse dung for fuel</li> </ul>
Low hills and lower hill slopes	<ul style="list-style-type: none"> <li>▪ Stone outcrops and boulders</li> <li>▪ Grasses</li> <li>▪ Fruiting plants</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rock art/markings</li> <li>▪ Stone features</li> <li>▪ Source of stone for use in valleys</li> <li>▪ Settlements</li> <li>▪ Ritual</li> </ul>	<ul style="list-style-type: none"> <li>▪ Winter camps on terraces</li> <li>▪ Windbreaks for stock</li> <li>▪ <i>Ovoo</i> and stone cairns on hill saddles</li> <li>▪ Ceremonial use</li> <li>▪ Pasture use by stock</li> <li>▪ Berries for jam</li> </ul>
Steep mountain slopes and high mountain tops	<ul style="list-style-type: none"> <li>▪ Fauna (Argali sheep, ibex, snow leopard)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Burial (e.g., Pazyryk mummies, Ukok Plateau)</li> <li>▪ Spiritual</li> </ul>	<ul style="list-style-type: none"> <li>▪ Some hunting (e.g., wolves)</li> <li>▪ Some prohibitions on hunting certain species</li> <li>▪ Source of Golden Eagles</li> <li>▪ Spiritual connections,</li> <li>▪ Ceremonial use</li> </ul>

<sup>7</sup> For an example documenting cumulative landscape change in a grazed and logged forest in Australia, see Dean-Jones and Brown (2012).

Table 3 illustrates how the use and appreciation of natural and cultural features can be envisioned as co-evolved. It illustrates how the natural features of broad ecological zones or landform types provide resources that humans have used for various purposes in the past and use in the present (e.g., sources of food, building materials, spiritual connection). Thus the natural features on which cultural values depend can be linked to broad landforms (diverse resources) and specific species and resources. These may include, for example: fauna – wild and domesticated animals; flora including timber for building and fuel; stone; and water. In the case of nomad herders, for example, there is dependence on the continuing availability of pasture grasses (in 2010, drought in Mongolia resulted in the loss of some ten million livestock), on a genetically diverse domestic animal pool, on wood (for constructing buildings and for fuel to supplement the use of dung), and on good quality drinking water.

In summary, the linkages between natural attributes/values and cultural attributes/values are complex. The links will have varied over time (e.g., pre-4,000 year old hunting societies versus later horse-dependent nomadism). A biocultural landscape approach recognises humans as part of nature; and the natural values and the cultural/spiritual values as co-dependent and entangled. A good example of a shift in cultural and spiritual values related to natural features is the phenomena of sacred mountains. Sacred mountains are found in Mongolia and across Asia. In pre-Buddhist times in central Asia, during Bon Shamanism, spirits were believed to inhabit certain mountains; mediation practices were required to maintain balance between a spirit world and the world of the living. In the Buddhist era much of the Bon religion fused with Buddhism and mountains became places for meditation and ritual use (e.g., sutras were cited and spirits divined). After nearly 80 years of communism and repression of religion in Mongolia, including Buddhism and Bon, these deeply rooted practices re-surfaced though a considerable body of knowledge and practice was also lost. We argue that accumulations of these spiritualities and other intangible cultural attributes are part of the value of the biocultural landscape.

### 7.3 Biocultural landscapes and ‘entanglement’

*TOR 3. Provide an understanding of local perspectives on the ‘entangled’ dimensions of the biocultural landscape and the interconnected character of the natural, cultural and social values of the property.*

#### 7.3.1 Meanings

In an earlier section of this report (Terms used in this report), we have provided meanings for the terms “biocultural landscape” and “entanglement”. Here we briefly explain how we see the interconnectivity of these terms. For this purpose we begin with a brief background.

The term “biocultural diversity” arose in the field of nature conservation, which expands on the term ‘biodiversity’. Biodiversity was promoted in the mid-1980s (e.g., Wilson 1988) and became incorporated into the international *Convention on Biological Diversity* at the 1992 Earth Summit at Rio de Janeiro. The seemingly self-evident term became increasingly critiqued for viewing ‘biodiversity as arising on its own, with no connection to people’s actions, and sees local peoples as threats’ (Hathaway 2012: 37). Consequently,

The main innovation of biocultural diversity is to posit a link between particular kinds of peoples (often those seen as ‘indigenous’) and biodiverse environments,

and to use the sentiments of valuing and protecting already created by ‘biodiversity’ as a rallying point. (Hathaway 2012: 37)

Though biocultural diversity has become a concept typically used as a crisis narrative (Brosius and Hitchner 2010),<sup>8</sup> it has also ‘come to occupy a central place in defining the health and well-being of socio-ecological systems’ (Martin, Mincyte and Münster 2012: 5). Thus biocultural diversity underpins the concept of biocultural landscape and means ways that natural-cultural diversity is inextricably linked or entangled.

A second origin of the term “biocultural landscape” relates to the discourse on “cultural landscape”, a concept with late nineteenth century European origins. The idea of cultural landscapes came to prominence in the heritage field in the 1980s and has strongly influenced thinking in World Heritage (see *World Heritage Papers* 6, 7, 26). The World Heritage Committee adopted “cultural landscapes” as a category within the World Heritage Convention’s *Operational Guidelines* (UNESCO 2013) in 1992. Though the concept has provided much value in the heritage field (e.g., recognising Indigenous presence in and connection to land), this seemingly self-evident term (‘profoundly ambiguous and oppositional even in its linguistic construction’; Head 2010: 439) came to be critiqued for its material focus, for maintaining a dichotomy between nature and culture, and for its anthropocentric construction (e.g., Head 2010). Thus terms such as biocultural landscape (e.g., Plumwood 2006, Verschuuren et al. 2014) and socio-natural landscape have come to be increasingly adopted in humanities/social science discourse.

Thus, the concept of biocultural landscape has separate yet overlapping disciplinary origins in the natural and social sciences. In our view, “entanglement” is a useful explanatory framework for the concept of “biocultural landscape”. Specifically, the idea of entanglement resists binarist thinking (e.g., culture-nature; tangible-intangible) and views the social and natural, material and symbolic as *co-constitutive* and always *becoming*. Thus a biocultural landscape is constituted through the mutual intra-actions (or entanglements) of socio-ecological systems.<sup>9</sup>

### 7.3.2 Local perspectives

Here we use the term “local” in three ways: first, communities of nomad herders who occupy the field study area (i.e., *Petroglyphic Complexes of the Mongolian Altai* and Altai Tavan Bogd National Park); second, local officials, including rangers, of the protected area administration; and, third, the perspectives of team members (the authors) arising from our short experience of “the local”. We discuss each of these groupings in turn.

1. **Nomad herder perspectives.** There is limited published information on worldviews of the nomad herders of the Mongolian Altai, and in particular anthropological writing. Here we draw on work by Paula DePriest (2007).<sup>10</sup> For DePriest, contemporary Mongolian nomadic cultures ‘represent cross-currents that intermix many cultures and different spiritual traditions and worship practices’ (De Priest 2007: 104). However, within the different religious traditions there is a practical separation of worship functions:

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<sup>8</sup> See also Anna Tsing’s (2012: 95) use of the terms ‘contaminated diversity’ (collaborative adaptation to human-disturbed ecosystems) and ‘slow disturbance’ (anthropogenic ecosystems in which many other species can live).

<sup>9</sup> This view draws from a range of philosophical and theoretical positions: for example, Actor Network Theory (Latour 2005), Assemblage Theory (Delander 2006) and post-humanist perspectives.

<sup>10</sup> Other literature consulted include Dobson and Mamyev (2010) and Fijn (2011).



Individuals petition the disinterested heavenly deities; clan elders conduct ancestor worship ceremonies; and lamas guide Buddhist worship – but only the Shaman or Lama-Shaman negotiate, wrestle, and trick the underworld spirits. (DePriest 2007: 105)

DePriest discusses worship undertaken in three main contexts – worship of spirit-masters of places, worship of spirit-masters of animals, and worship of ancestors (DePriest 2007: 105-111). Key places of worship are *ovoo* (stone cairns or ‘teepees’ of poles and sticks found on mountain passes, road crests, and difficult river crossings honouring the spirit-masters of these places) and *ongons* (which refers to both sacred objects and ceremonial sites).<sup>11</sup> Some Bronze Age ‘deer stones’ and Turkic Period ‘stone men’ are venerated as *ongons*, illustrating the way deep-time stone features have contemporary meanings and power. We observed many *ovoo* / *ongon* during our travels through the Altai Tavan Bogd National Park.

From this extremely brief overview, we conclude that the cosmologies of nomad herders are diverse and intermix different religious-spiritual traditions (popular Buddhism, popular Muslimism, shamanism). For nomad peoples, the landscape (including heavenly deities, underworld spirits, and ancestor souls, along with Buddhist deities) is alive (numinous<sup>12</sup>) with spiritual forces and power. Thus it seems reasonable to speak of a sacred landscape populated with spirits; and places and things through which spirits are worshipped (*ovoo*, *ongon*, sacred objects, sacred mountains). Humans, whether individually or through clan elders, spiritual leaders or shamans, inhabit a world of master-spirits (Pegg 2001, in DePriest 2007: 105) that control all aspects of herding life, including fertility, health, and wealth. In this cosmology, it is the spiritual that most strongly defines a world in which the biocultural dimension is simultaneously subservient and entangled.

2. ***Perspectives of protected area administration.*** During our discussions with Mr Atai, he made the comment that it is not possible to separate nature and culture in modern nomad people’s lives. This is evident in many ways (as touched on above), and can also be seen in the location of current nomad herder settlement camps in close proximity to locations of rock art/markings, including within the World Heritage property. These camp locations take advantage of steep ridge slopes and rock faces to provide shelter from winds and severe weather.

Park management in Bayan Oglia Aimag places considerable emphasis on contemporary livelihoods of the nomad herder communities (e.g., evident in the park management plan and in the roles of rangers). Park management views the management of the natural environment and cultural features as inextricably linked to the occupation and use of the area by the nomad herder groups. This key objective is further emphasized in proposed changes to legislation that would give greater control of park management to nomad herder families. Thus, park management recognises nomad herders as key knowledge holders and simultaneously recognises the need to work with communities in implementing key nature conservation and cultural heritage management programmes.

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<sup>11</sup> *Ongon* also refers to the ‘uncut mane of Mongolian ponies and to bundles of cloth ribbons’ (DePriest 2007: 104)

<sup>12</sup> ‘Numinous is a word that references an inner (immanent) divinity or supernatural force.’ (Byrne 2014: 3)

It is our observation that Western notions of culture and nature are having the effect of breaking down traditional views (e.g., in the way World Heritage, government administrations, and management planning often establish and operate separate nature and culture silos). In general terms this has resulted in the separation of biocultural landscapes into cultural and natural landscapes each with their own sciences, specialists, policies, and subsequent funding streams that managing entities have to work with.

For park management, and including the World Heritage property, the biocultural landscape is one in which natural, cultural, social, and spiritual values are entangled, and the nomad herder communities primarily hold knowledge of this entanglement.

3. ***Our perspectives.*** Our four day visit of long days and short stops through the Mongolian Altai was filled with amazing sights, a great deal of learning from our hosts, and, at times, feelings of sensory overload. The following extract attempts to evoke something of this experience.

Deep time stone features cover valley floors. Sculpted faces gaze eastward. Rock markings evoke other worlds at present places. Cameras accumulate memories. Strips of blue and white cloth flap wildly. Wood structures entomb Kazakh 'sleeping' places. Snow-capped peaks jut into blue sky. Warmly dressed nomads herd sheep, goats, cattle, horses, and yaks. Motorbikes and horse-riders weave between ancient alignments of standing stones. A solar panel powers a computer. Taste of creamy yak cheese; the sharp warmth of vodka. Dung fuels stoves. Sleep on decorated felt carpets. Larch trees stand brown against winter snow. Ice thickens on stream surfaces. Ice cracks beneath the Russian jeep. Icy winds whip the landscape. Men handsome in military uniform. Summer hay fields deep in snow. A young Golden Eagle trained to hunt. Ibex navigate the side of a sacred mountain; their ancestors etched into rocks below. The skulls of Argali Sheep gathered together. Displaced stones at illegally excavated burials. There is beauty, power, danger, and vibrancy in this landscape, in things, in people. The landscape is alive.

Steve Brown (Field Notes, 17 Oct. 2014)

In this writing, an attempt is made to capture a sense of a first visit to a previously unvisited (to the team members) landscape and the ways in which landscape, things, and time are conflated. The Mongolian Altai is a living landscape where nomad herders, domestic stock, and camps are a constant presence. The topography is spectacular and material traces of past human presence are ubiquitous. In short, there is a sense of wholeness and an inability to separate natural, cultural, social, spiritual, and temporal dimensions. We suggest that there is a contrast between such first-time experience of the landscape and subsequent attempts to separate and categorise features (e.g., endangered species, archaeological sites, sacred natural sites, contemporary nomadism), as is common, for example, in protected area management planning. We have sought to retain an experiential sense of the entangled dimensions of the biocultural landscape in preparing this report.



## 7.4 Exploring traditional and conventional legal approaches

TOR 4: *Explore how traditional and conventional/legal management approaches could be reinforced if based on a multidimensional understanding of all the values of the properties and not just or mostly those values that triggered the inscription.*

### 7.4.1 Integrating local community and conventional/legal management approaches

In our previous discussion we outlined how the disciplinary perspectives that underlie the World Heritage inscription of the *Petroglyphic Complexes of the Mongolian Altai* are predominantly art history and archaeological perspectives (Section 4.5). We have also outlined how the cosmologies of contemporary nomad herder communities occupying the region view the landscape from a radically different perspective to that of World Heritage (Section 8.3.2); and how the Mongol Altai Range Special Protected Areas Administration emphasises working with these communities in their approach to the management of the Altai Tavan Bogd National Park and World Heritage property (Section 8.3.2). The contrast between the values which are the focus of the World Heritage inscription versus local community perspectives is one that emphasizes stasis and linear time (i.e., material traces of human occupation as fixed in the past) versus dynamism and multi-temporality (i.e., a living landscape approach, where material traces hold meaning for contemporary local communities). We recognise also that these perspectives do not have to be necessarily oppositional.

We provide here a number of observations with regard to integrating local community and conventional/legal management approaches, which is an approach which we see as something that the Mongolian government is implementing.

First, building on the opening paragraph, we recognise art history and archaeological perspectives as antithetical to contemporary nomad herder cosmologies of a landscape imbued with spiritual power. We suggest that a process of mutual understanding of the “others” perspectives requires a process of shared learning (see Terms used in this report). We argue that a shared understanding of different views is essential if local community landscape management approaches and conventional/legal management approaches (as well as ecological science) are to work synergistically.

Second, we make the point that there are examples of collaborative work being undertaken between local communities (nomad herders, military staff of the border stations) and the protected area administration. The most obvious example in this regard is monitoring of endangered species, such as Argali Sheep, ibex, and snow leopard. It is our understanding that both groupings have an interest in the sustainable management of endangered species. Prohibitions on hunting at sacred mountains (such as Shiveet Khairkhan) is a customary practice that aligns with an ethos of nature conservation.

Third, we see a major disjuncture between the objective of maintaining healthy ecosystems and current overstocking of areas of High Mountain Steppe grasslands. We understand from our discussions in Mongolia that the number of stock in Mongolia has doubled in the period from 1918 (29 million livestock) to the present day (despite huge livestock losses in the 2010 drought). Increased stock numbers are seen as a major, but not the only, cause of widespread pasture degradation. We expect that the nomad herders have an interest in maintaining healthy pasturelands, but may be subject to economic pressures. Although we are not aware of all information on this issue, we suggest the need for research to: (1) determine the level, and causes, of pasture

degradation; (2) determine the carrying capacity of high mountain and mountain steppe areas subject to grazing; and (3) ensure appropriate stocking rates that ensure an ecological-economic-social balance is incorporated into license agreements. Such research requires a collaborative approach between local community knowledge/skill and ecological expertise.

#### **Box 4: Rights-based approaches to conservation and World Heritage**

A rights-based approach to heritage aims to achieve a positive transformation of power relations among the various heritage actors and consider bundles of rights derived from the human, cultural, religious, and environmental rights and others. Rights-based approaches aim at strengthening the capacity of duty bearers (the institutions obligated to fulfil the holders' rights) and empower the rights holders (who do not experience full rights). Currently there is no framework for a rights based approach within the World Heritage Convention and some authors argue there is a lack of guidance and criteria on how to evaluate and advise local management but also government parties on rights-based issues (Ekern et al. 2012; Oviedo & Puschkarsky 2012) According to Oviedo & Puschkarsky (2012), the discourse and practice about protected areas and World Heritage sites has significantly evolved over the last decades. Efforts to empower local communities so that they can affirm their rights and act on their responsibilities, and to integrate natural and cultural values are increasingly seen as fundamental elements of conservation approaches. Rights-based approaches in heritage management is an issue that IUCN, ICOMOS and ICCROM, Advisory Bodies to the World Heritage Committee, have been actively engaged with some years.

Fourth, and related to grassland degradation, is the widespread occurrence of dispersed vehicle tracks. It is our understanding that prior to 1990, there were almost no motorised vehicles using this region and that all travel was via horseback, camel, and wood carts. Twenty-five years on it is evident that multiple vehicle tracks (motorbikes, cars, trucks) are impacting vegetation, compacting soils, and causing loss of topsoil across many valley floors and lower hill slopes (some of which contain boulders and rock surfaces with rock markings – both in and beyond the World Heritage property). The level of vehicle use within and beyond the Altai Tavan Bogd National Park - by nomad herders and tourists - is predicted to increase in coming years, and thus exacerbate the problem of multiple vehicle tracks and denuding of vegetation. The issue is one where contemporary patterns of moving by nomad herders is changing rapidly with the uptake of new technologies (motorised transport, but also solar panels, satellite dishes, and computers). Related to this is issue is driving of vehicles through stone features such as alignments of stones.

Finally, we see some tensions between the contemporary activities at the World Heritage rock art sites and conventional legal management approaches. Thus while there are long term and ongoing impacts on rock art/markings arising from natural processes (e.g., freezing and heating of rock surfaces) there are also impacts arising from domestic stock and from people (tourists, nomad herders, border guards). In our field visits, we noted recent markings (names and dates, copies of older images) at most of the rock art/markings sites we visited (see Box 2). We understand, for example, that there is a tradition amongst border guards to mark places; and that some tourists are also attracted to mark/graffiti rock surfaces. Nomad herders at their winter camps also mark rock surfaces and remove stones (e.g., for dry stone walls), some of which may have old markings on them. We do not fully understand the type and range of markings

made by this group (some may be related to spiritual activities) and research on this matter is needed.

**Figure 7. A view on a mountain steppe valley in autumn.** Photo credit: Bas Verschuuren



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## Annex 1: Connecting Practice Information Sheet

### CONNECTING PRACTICE

#### Defining new methods and strategies to support Nature and Culture through engagement in the World Heritage Convention

**The 'Connecting Practice' project aims to explore, learn and create new methods of recognition and support for the interconnected character of the natural, cultural and social value of highly significant land and seascapes and affiliated biocultural practices.**

The World Heritage Convention is the leading international instrument for conservation that brings together nature and culture. Yet a range of obstacles to good performance exist and need to be addressed.

The project is a joint initiative between IUCN and ICOMOS providing the opportunity for exploring how to form a more genuinely integrated consideration of natural and cultural heritage under the World Heritage Convention – 'bridging the divide' that is often observed between nature and culture – overcoming the many unintended adverse outcomes that can result. It involves as partners the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German Bundesamt für Naturschutz (BfN), COMPACT and Swiss Federal Office for the Environment (FOEN). The project is supported by The Christensen Fund.

#### Long-Term Objectives

- Influence a shift in conceptual and practical arrangements for the consideration of culture and nature within the implementation of the World Heritage Convention, and to engage new actors in promoting positive results for conservation and communities.
- Establish new and stronger partnerships with organizations that are already engaged in World Heritage and are taking biocultural and community-based approaches to sustainable development - and support these partners to multiply results through their wider programmes, with States Parties and within the meetings of the World Heritage Convention.

#### Short-Term Objectives

- Take a local-global learning approach engaging in three contrasting landscapes/seascapes – selected to be regionally diverse, representing different stages in the World Heritage designation and management process – to ensure that lessons are credible, workable and robust.
- Explore and define practical strategies to deliver a fully connected approach to considering nature and culture in the practices and institutional cultures of IUCN and ICOMOS, in order to deliver advice that will achieve better conservation and sustainable use outcomes that reflect the perspectives, interests and rights of custodians and local communities.

The project lasts from October 2013 to April 2015. IUCN and ICOMOS networks will be engaged in the work, and the outcomes will be presented to the World Heritage Committee sessions, ICOMOS General Assembly and World Parks Congress (both November 2014). A final report documenting the project's outcomes and recommendations will be produced.

#### Project coordination:

Tim Badman, IUCN  
Kristal Buckley, ICOMOS



## Annex 2: Terms of Reference Fieldwork Mongolia

### TERMS OF REFERENCE Fieldwork Mongolia

The members of the team will:

- As part of the IUCN/ICOMOS Connecting Practice project, participate in the fieldwork to **Petroglyphic Complexes of the Mongolian Altai (Mongolia)** between **11 and 20 October 2014**, pending possible minor adjustments due to logistics and travel arrangement, to explore, learn and contribute to creating new methods of recognition and support for the interconnected character of the natural, cultural and social value of heritage properties;
- Liaise with IUCN's Programme on World Heritage, ICOMOS World Heritage Unit and the relevant authorities in the host country (as advised by IUCN and ICOMOS) in relation to organising the above fieldwork;
- As part of a team of four members, adequately prepare for the fieldwork by reviewing the documents that supported the nomination process of the property, researching other relevant literature, becoming acquainted with local cultural protocols and exchanging views with the other team members in order to reach a common approach;
- While in the field, be willing to work closely together with the other team members as well as with representatives of communities and government authorities (including responding to any questions they may have concerning World Heritage processes and practices), in a spirit of a two-way learning process;
- In so far as possible, and while always keeping in mind differences between the objectives of the Connecting Practice Project and the official IUCN and ICOMOS evaluation and reactive monitoring processes, engage in a meaningful and open dialogue with representatives from the government and other stakeholders on ways to sustainably and effectively manage the World heritage property and its wider context;
- In close collaboration with the other team members and in consultation with designated government officials, prepare a collective Fieldwork Report that documents the visit, provides an holistic view of the World Heritage property for its cultural and natural heritage, reflects a collective view of all those involved in the writing the report, and addresses the following points:
  - Explore the relationships between the cultural values that supported the inscription of the property on the World Heritage List and other significant cultural and natural values, including considerations of the cultural value of nature and how cultural systems help or are necessary to sustain natural values;
  - Identify the natural features and values upon which the cultural values depend and how they are interconnected;
  - Provide an understanding of local perspectives on the 'entangled' dimensions of the biocultural landscape and the interconnected character of the natural, cultural and social values of the property;
  - Explore how traditional and conventional/legal management approaches could be reinforced if based on a multidimensional understanding of all the values of the properties and not just or mostly those values that triggered the inscription;
  - Provide a summary of the challenges encountered throughout the fieldwork and when writing the report and suggest ways in which the preparation and implementation of future joint fieldwork could be improved.
- Take photographs of the significant features and values of the property as well as of meetings and informal discussions held during the fieldwork to support the written report, using a digital camera and deliver a CD containing the images with a short

text describing each image to IUCN. These photos will become the property of IUCN and ICOMOS for use in its presentations, publications and communications material, whilst fully referencing the photographer;

- Submit an electronic version of the Fieldwork Report to IUCN no later than **7 November 2014**; and
- Be willing to respond to questions from the IUCN World Heritage Programme and ICOMOS Secretariat on the report and lessons learnt from the fieldwork that can inform the results of the Connecting Practice Project, including through a conference call if possible.

NOTE: The team members should avoid making any statements to the concerned State Party, including local authorities or the media, that could create confusion over the objectives of the fieldwork in relation to the official evaluation and reactive monitoring processes of IUCN and ICOMOS. The pilot nature of the Connecting Practice Project should be clearly explained. If the consultant is confronted with any problems (such as politically sensitive issues) during the fieldwork, he should contact the IUCN Programme on World Heritage for advice.



### **Annex 3: Petroglyphic Complexes of the Mongolian Altai Statement of Outstanding Universal Value**

(Source: <http://whc.unesco.org/en/list/1382>)

#### **Brief synthesis**

The Petroglyphic Complexes of the Mongolian Altai include three rock art sites in Bayan-Ulgii aimag: Tsagaan Salaa-Baga Oigor of Ulaankhus soum, and Upper Tsagaan Gol (Shiveet Khairkhan) and Aral Tolgoi, both of Tsengel soum. All three are located in high mountain valleys carved out by Pleistocene glaciers. These three property components include large concentrations of petroglyphs and funerary and ritual monuments reflecting the development of human culture over a period of 12,000 years. The persistent relationships between rock art, surface monuments and the larger physical context of rivers, ridges and cardinal directions create a vivid sense of the integration of human communities with the land they inhabited.

The earliest images reflect a period beginning in the Late Pleistocene and lasting through the Early Holocene (ca. 11,000 – 6,000 years BP), when the paleoenvironment shifted from dry to forested steppe and the valleys provided an ideal habitat for hunters of large wild game. Later images from the middle Holocene (ca. 6,000 – 4,000 years BP) reflect the gradual reassertion of steppe vegetation in this part of the Altai and the early emergence of herding as the economic basis of communities. Imagery from the succeeding, Late Holocene Period, reflects the transition to horse-dependent nomadism during the Early Nomadic and Scythian periods (1st millennium BCE) and the subsequent spread of steppe empires in the later Turkic Period (7th-9th c. CE).

The Petroglyphic Complexes of the Mongolian Altai represent the most complete and best preserved visual record of human prehistory and early history of a region at the intersection of Central and North Asia.

#### **Criterion (iii)**

The Petroglyphic Complexes of the Mongolian Altai Mountain provide an exceptional documentation of the pre-historic and early historic communities in the northwestern Altai Mountains, at the intersection of Central and North Asia. The petroglyphic imagery includes animals such as mammoths, rhinoceros, and ostriches, executed in static profile contours. These animals inhabited North Asia when the region was significantly colder, drier and covered by rough grasses and forbs rather than forests. By the end of the Late Pleistocene (ca. 11,000 BP), the dry steppe was gradually being replaced by the forested environment of the Early Holocene (ca. 11,000 – 6,000 BP). This period is reflected in majestic images of elk, aurochs, and ibex, executed in profile silhouettes. There are very few sites in North Asia that include pre-Bronze Age petroglyphs in such number, variety, and quality.

#### **Integrity**

The two largest sites, Tsagaan Salaa-Baga Oigor and Upper Tsagaan Gol, include a unique array of material relating to the Bronze and Iron Ages. Together with Aral Tolgoi, the three sites include an undiminished record of human culture in this region over a period of more than 12,000 years. To preserve the integrity of the property, the potential impact of humans and their grazing animals on the petroglyphs requires strict control.

#### **Authenticity**

The authenticity of the property is demonstrated by its physical condition, which aside from the wear of time and the elements is essentially pristine. There is some modern damage on rock surfaces (writing, graffiti) located close to roads; but, in general, the

rock art and monuments are relatively unimpacted by human or animal activities. The authenticity of the sites is protected by their relative inaccessibility due to both terrain and weather.

### **Protection and management requirements**

The three sites of Tsagaan Salaa-Baga Oigor, Upper Tsagaan Gol, and Aral Tolgoi are registered as historical and cultural properties under state protection since 2008 following the provisions of the 2001 Law on Protecting the Cultural Heritage of Mongolia. The whole of Aral Tolgoi and part of the Upper Tsagaan Gol Complex are also included within the Altai Tavan Bogd National Park, listed since 1994 under the Mongolian Law for Special Protected Areas; this law offers additional protection to the natural environment including water sources and restricts urban and rural development. Ideally this environmental protection should be granted to all three property components. The Mongolian Parliament in 2012 considers amendments to the Law on Protecting the Cultural Heritage of Mongolia in order to include specific articles concerning management of cultural and natural heritage inscribed on the World Heritage List and the National Tentative List; once these additional articles have been adopted, the protection for the property will be further strengthened.

The traditional protection by local inhabitants of this region is a key factor in the management of the Petroglyphic Complexes of the Mongolian Altai. Herders who have already been engaged in heritage protection in some soum (departments), need to be engaged as crucial partners for sustainable management. In this context, the role of the national authorities is important in the provision of incentives for traditional community management as well as for supporting strict control with regard to development proposals for purposes such as mining, road works or tourism infrastructure. This control must apply not only in the nominated areas but also in their upstream hinterland, where development could have detrimental effects to the Outstanding Universal Value of the property. Local and national management approaches could be more effectively integrated through a local site manager; who could ensure regular communication and exchange between the two levels. Management could also be better targeted if based on the results of a comprehensive survey and inventory of the petroglyphs in all three components of the property for their continued protection.

#### Annex 4. Fieldwork in Mongolia: daily journal

This section of the report comprises a journal of activities undertaken during the period 12-21 October 2014 when the IUCN-ICOMOS Connecting Practice Project team members – Steve Brown, Alexey Rogozhinsky and Bas Verschuuren – visited Mongolia. Its purpose is to communicate the extent of meetings and fieldwork undertaken, which provided the basis upon which our understandings of nature-culture connections is understood with respect to the World Heritage property – *Petroglyphic Complexes of the Mongolian Altai*.

#### Connecting Practice Project: Summary of activities undertaken in Mongolia

Date	Activity
Sunday 12 Oct.	Team members arrive Ulaanbaatar, Mongolia
Monday 13 Oct.	Meetings with officials in Ulaanbataar
Tuesday 14 Oct.	Fly to Oglui (far western Mongolia). Drive 200km to Ranger Station in Altai Tavan Bogd National Park
Wednesday 15 Oct.	Visit Aral Tolgoi rock art site
Thursday 16 Oct.	Visit Upper Tsagaan Gol rock art site
Friday 17 Oct.	Visit Tsagaan Salaa – Baga Oigor rock art site
Saturday 18 Oct.	Fly to Ulaanbaatar. Visit National History Museum
Sunday 19 Oct. to Tuesday 21 Oct.	Team members depart Ulaanbataar

**Meeting with nomad herder.** Photo credit: Steve Brown



## Fieldwork Schedule: Daily Journal

### Sunday 12 October

- Team members – Bas Verschuuren, Alexey Rogozhinsky and Steve Brown – arrive Ulaanbataar.
- Accommodation at Ulaanbataar Hotel (Sukhbaatar Square 14).
- 17.30 Team members meet for preliminary discussions on the World Heritage (WH) property *Petroglyphic Complexes of the Mongolian Altai* and matters relevant to the Connecting Practice Project.

### Monday 13 October

8.00 Team members meet over breakfast to discuss and identify issues to discuss with Mongolian officials.

10.00 Team members are met by Mr. Kh.Erdembileg (Programme Officer for World Heritage and Culture, Mongolian National Commission for UNESCO) and Ms Bayartsengal (Secretary, WWF Mongolia). Walk to WWF office and introduced to Mr Chimed-Ochir Bazarsad (Director, WWF, Mongolia).

11.00 to 12.45 Meeting with Mongolian officials at 15160 Government Building 2 (United Nations Street):

- Mr. Norov Urtnasan. Chair, Mongolian National Committee for ICOMOS; President, Foundation for the Protection of Natural and Cultural Heritage (NGO); Head, Department of Foreign Language and Culture, Ulaanbataar-Science University. Head of the nomination team in the preparation of the *Petroglyphic Complexes of the Mongolian Altai* Nomination Dossier.
- Mr. G.Enkhbat, Director, Cultural Heritage Centre of Mongolia, under the Ministry of Culture, Sport and Tourism.
- Mr. A.Namkhai, Advisor to the Minister of Environment and Green Development; former Director of Administration for Special Protected Areas.
- Mr. Dr. B.Tsogtbaatar. Head of Division, Institute of Archaeology, Mongolia.
- Mr. J.Gantulga. Researcher, Institute of Archaeology, Mongolia.
- Mr. Dr. Ch.Eroolderdene. Senior Researcher, Institute of Archaeology, Mongolia.
- Ms. A.Duurenjargal. Director of Research and Information, Centre for Mongolian Sacred Sites (NGO).
- Mr. Ts.Samdan. Executive Director, Centre for Research, Training and Information on World Heritage (NGO).
- Ms. N. Ouyndelger. Foreign Cooperation Advisor to Parliament Member (L.Enkhamgalan).
- Mr. Kh.Erdembileg, Programme Officer for World Heritage and Culture, Mongolian National Commission for UNESCO.

Key points:

- Introductions. Connecting Practice Project is described and there is some discussion.
- General discussion of inseparability of culture and nature in the Mongolian worldview.
- Sacred landscapes (e.g., mountains) in Mongolia have interconnected tangible and intangible dimensions. Like culture-nature, these aspects are difficult to separate and difficult to adequately represent in World Heritage (WH) nominations.
- Thus there is a tension between 'on the ground' experience (nature-culture; tangible-intangible as inseparable) and the nomination of sites to the WH List. For example, in preparing the nomination of the *Petroglyphic Complexes of the Mongolian Altai*, it was found to be difficult to integrate the petroglyphs with other cultural-natural features of the landscape, even though natural environment scientists were consulted.
- It is the experience of Mongolia that it is difficult to integrate cultural landscapes and sacred mountains in nominating properties to the WH List. For example, how can the boundaries of a sacred mountain (such as Burkhan Khaldun Mountain), whether past

or present, be delineated? What is encompassed by the idea of a sacred mountain? How do the intangible heritage values relate to the physical delineation of the nomination?

- There is difficulty also in nominating nomad herder culture to the World Heritage List, even though, for Mongolia, there is a deep time tradition of nomadic herding, such as in the region of the *Petroglyphic Complexes of the Mongolian Altai*.
- Discussion of a transboundary Altai Mountains property across Mongolia, Russia, China and Kazakhstan. There have been many meetings on this proposal, starting with local people and NGOs in 2007, and now three or four meetings at the national political levels: Russia is proposing a 'Euro-Asian ecological corridor' (at a recent meeting in Moscow). There are conceptual and political tensions in this work – Mongolia and Kazakhstan are proposing their areas as 'Mixed Sites' (though they are not on the relevant Tentative Lists as yet), while China (on the Tentative List) and Russia are proposing their areas as 'Natural Sites'. This is a challenging issue for these countries to discuss and move forward on.<sup>13</sup>
- The feeling of the meeting was that our visit was timely. This was for a number of reasons: (1) for the Mongolian government to better understand cultural landscapes, biocultural landscapes, and 'heritage landscapes'; (2) because Mongolia is revising its Tentative List (and is looking for: (i) new concepts useful in integrating 'mixed' values of proposed properties; and (ii) the type of nomination [e.g. serial nominations, mixed etc.]); and (3) Mongolia is currently discussing the best use of the revised 'Law on Protection of Cultural Heritage' and considering revisions of the 'Law on Special Protected Areas'.



Team members and Mongolian officials. Photo credit: Alexey Rogozhinsky

13.00 Meeting with Mr. T.Tuvshinbat - Specialist, Special Protected Areas Administration, Ministry of Environment and Green Development.

Key points:

- Management plans for protected areas are developed for each region or province (Aimag). Thus there is one management plan for Bayan Oglui Aimag (based in Oglui) covering three national parks and one nature reserve.

<sup>13</sup> We understand that there exists a resolution on this matter, though we did not sight it.



- The Aimag Directors of protected areas hold staff meetings every six months, usually at a sacred place.

14.30 Meeting to discuss logistics and some financial aspects of field trip with Mr B.Chimed-Ochir at WWF office. Two vehicles will be used for travel for safety reasons due to the likely weather and track conditions.

15.30 Visit to Mongolian National Museum. A series of short discussions held with:

- Mr. Budbayar. Vice-Director, Mongolian National Museum.
- Archaeologist, Mongolian National Museum.
- Mr. Odbaatar Tserendorj, PhD. Head of Research and Exhibition Department.
- Ms. J.Myandas. Marketing Manager, Mongolian Museum of Natural History.

16.15 Visit to offices of the Ministry of Culture, Sport and Tourism. Meeting with Ms Ts.Tsendsuren – Director, Cultural Heritage Division (CHD).

Key points:

- The role of CHD in relation to WH is to develop and implement policy.
- The Director CHD expressed the view that cultural heritage should be protected by local people, which is a matter addressed in the recently revised: *The Law on Protecting Cultural Heritage of Mongolia, 2014*.
- The proposed new law allows for contracting of local people to have responsibilities for cultural heritage. For example, local guards can be hired from amongst the people that live on and among a rock art site.
- Each Aimag (province) has a Cultural Heritage Centre or Cultural Centre. Annual meetings are held to provide training to regional staff.
- Cultural heritage management is centralised in Ulaanbaatar, but power is held in the Aimags. . The Governor of each Soum (district; sub-region of the Aimag) receives money to implement cultural heritage programs. At the Aimag (provincial) level, Olgii has a management office or heritage centre. It has a budget but external and private funding usually supports work at the Soum level.
- To implement the new legislation on cultural heritage, a proposal was developed to fund 200 locally contracted staff across Mongolia. However, current finances are unlikely to enable this level of employment.

17.15 to 18.30 Team members hold discussions with Mr. Kh.Erdembileg.

19.00 Team members return to Hotel.

### **Tuesday 14 October**

4.30 Team members picked up by WWF vehicle from hotel by driver Mr. J.Burged.

5.15 Arrive airport and check in.

6.30 Flight MO-97 from Ulaanbaatar to Olgii (3-hour flight).

9.00 Arrive Olgii (one-hour time difference).

10.00 Meeting at office of Mr Aytkhaan Atai – Director, Mongol Altai Range Special Protected Areas Administration. Visit to the adjoining Information Centre.

Key points:

- The Mongolian Special Protected Areas Administration was established in 1960.
- In 1995, the first protected area legislation was introduced in Mongolia. New legislation is currently being developed.
- In the Bayan Olgii Aimag there are three national parks and one nature reserve. The largest, and the one we will visit is Altai Tavan Bogd National Park, which is 636,200 hectares in area.<sup>14</sup>
- There is a current management plan for the four protected areas of Bayan Olgii *Aimag* (available in Mongolian). The main objectives of protected area management in Bayan Olgii are: (1) protection of glaciers; (2) protection of flora and fauna; and (3) protection of culture and heritage.

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<sup>14</sup> The other protected areas in Bayan Olgii *Aimag* are: Tsambagarav Uul NP (111,000 hectares); Siilkhemlin Nuruu NP (14,080 Hectares); and Develiin Aral NR (10,300 hectares).



- Ten rangers located at five Ranger Stations staff the Altai Tavan Bogd National Park. The total number of rangers in the Mongol Altai Range Special Protected Areas Administration is 15.
- There are three Border Stations, staffed by military personnel, within the park boundaries. There is a cooperative agreement between the protected area agency and the military.
- The national park is divided into three zones: (1) core area (most westerly); (2) tourist zone (centre); and (3) limited use zone (east side). In addition, there is an extensive buffer zone on the east side of the national park.
- The number of tourists visiting the park each year is currently about 1,500.
- There are a number of cooperative agreements between Mongolia, Russia and China relating to conservation management (e.g., concerning Argali Sheep, Red Deer, Siberian Ibex, Snow Leopard).

12.30 Departure from Olgii in two vehicles – a WWF Mongolia Land Cruiser (Driver: Mr. Burneebaatar) and a Mongolian Altai Range Special Protected Areas Administration Russian jeep (Driver: Mr. M. Askhar).

14.00 Camel train. Short discussion with horseman.

14.30 Stop at hill saddle to see *ovoo* (a large stone cairn with blue [representing the sky] and white strips of cloth tied to wood posts). *Ovoo* are repositories for local spirits.

15.00 Stop at Tsengel, as this is the last place where fuel can be purchased. It is 41km from Tsengel to the boundary of the protected area buffer zone.

16.00 Visit to Turkic Period stone feature site, with alignments of standing stones.

On our drive through the buffer zone we pass an operating wolfram mine. It began operation in 1995, then ceased for a period, and now is operated by a Chinese/Mongolian company.

17.00 Arrive at boundary of Altai Tavan Bogd National Park, near the bridge over the Khovd Gol (river). Here there is Ranger Station, a *ger* (traditional felt yurt). This is the office and home of the local ranger, Ms S. Sarantuya (Ranger near Bayan Zurkh Mountain; the only female ranger of the 15 park rangers). She has been a ranger for six years. A meal is provided for us.

Key points:

- Ms S. Sarantuya has a background in forestry. She has a role in law enforcement. Illegal logging was a big problem in the park in the past, but this largely stopped five-six years ago because of the enforcement of legal penalties (including prison sentences). 80% of Larch Forest in Bayan Olgii Aimag occurs in this park.
- The process for obtaining wood by local residents, including nomad herders, is based on area licenses issued by the Ministry of Environment.
- The program of works for rangers is set with WWF Mongolia. This work relates to monitoring - mostly of endangered fauna.
- Tourists wanting to see rock engravings in the park can do so after purchasing an entry permit to the park (T3,000 for tourists; T300 for local people).<sup>15</sup> They are told by the Ranger how to locate the sites and told of activities prohibited in the park (e.g., not to damage sites or leave rubbish).

18.15 We get a view to one of the three very large lakes in the park.

19.15 Arrive at the Ranger Station at Syrgal, where three rangers are stationed - Mr. T. Soldat, Mr Sh. Azamat and Mr Kh. Batmunk. We are provided with dinner and spend the night at this location, all sleeping in the main room of the rangers' house.

### **Wednesday 15 October**



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<sup>15</sup> The tourist fee equates to less than two US dollars for foreign tourists and around 0,2 USD for local visitors.

7.45 Visit to Park Information Centre, a large wood and glass building, near to the two ranger houses. Discussion on the cooperative arrangements between Mongolia, Russia, China, and Kazakhstan on the Altai, which include six million hectares of protected areas. There is considered to be good relations at the local level through a network of contacts between protected area administrators. They are developing a framing concept titled 'Our Common Home of Altai'.

8.15 Depart Ranger Station and cross a bridge over a wide watercourse that links two lakes: Khoton Nuur and Khurgan Nuur. Short stop at a Border Station (permit inspections).

8.30 to 12.00 Travel on track over difficult terrain with snow and iced-over stream crossings on the west side of Khoton Nuur (Pelican Lake) to Aral Tolgoi rock art site. En route we pass eight vacated nomad herder summer camps and at least ten areas enclosed by wood fences. The fences are to exclude stock from areas where hay is grown for use in, and transported to, winter camps. Travel through areas of Larch Forest.

	
<p>Khoton Nuur and larch trees. Photo credit: Steve Brown</p>	<p>Border sign and recent standing stone. Photo credit: Steve Brown</p>

12.00 Arrive at Border Station located seven kilometers from the Mongolian-Chinese border where we undergo a registration process.

12.15 to 13.30 Visit to ARAL TOLGOI. For description see *World Heritage Site Nomination Document* (pp. 16-18).

13.30 Hosted to a meal by the military leader of the Border Station, Mr. O.Erbolat. We are asked NOT TO SHOW ANY PHOTOGRAPHS OF THE BORDER STATION.

15.00 Depart Border Station and return via our previous route.

17.00 Arrive at Border Station / Ranger Station and drive north along east side of lake edge.

17.10 Inspect a large Iron Age stone funerary structure, comprising an outer stone ring (c.20m diameter), a central stone mound (c1.5m high; 6m in diameter), four 'spokes' of mounded stone, and a single standing stone.

17.30 Visit to BILUU TOLGOI, which is not part of the World Heritage property. The rock art/markings are mostly Bronze Age and Iron Age, and include motifs of a chariot and possibly a snow leopard. The hill is extensively marked with images, many in panels. Noted two small *kurgan* (circular rock arrangements): one on the hilltop and one on the hill slope. At the base of the hill is an extensive nomad herder summer camp

(now unoccupied) comprising wood buildings and a large stock coral constructed of dry stone walls and wood and earth roofing.

19.00 Arrive back at Ranger Station where we spend a second night.

	
<p>Aral Tolgoi. Rock surface with markings. Photo credit: Steve Brown</p>	<p>Outline deer and recent name/date. Photo credit: Steve Brown</p>
	
<p>Biluu Tolgoi. View from hilltop. Photo credit: Steve Brown</p>	<p>Mr Atai, A. Rogozhinskiy and Ranger Mr. T.Soldat. Photo credit: Steve Brown</p>

**Thursday 16 October**

6.30 Depart Syrgal Ranger Station.

7.15 Visit *kurgan* with three standing stones, one a 'deer stone'. An inverted and buried vodka bottle noted between two of the stones, which may relate to shamanic practice.

7.35 Visit *kurgan* comprising a large stone mound set within an outline square of large stones; and ringed by numerous small stone circular/rectangular stone features. Iron Age (c.2,500 BP).

8.15 Pass a contemporary cemetery with log structures.

8.30 to 9.15 Travel through a valley floor described to us as a 'ritual landscape', which comprises a large number and variety of site types with standing stones (some are sculpted, some not), alignments of stones, and rectangular 'platforms' (typically outlined with vertical slabs and in-filled with stones). Predominantly Turkic - Medieval periods.

	
<p>Stone feature site with standing stone and platforms. Photo credit: Steve Brown</p>	<p>Frosty landscape with stone feature and alignments of stones. Photo credit: Steve Brown</p>

9.15 We climb a low granite hill for the view across the Mogoiitiin hundii or Snake Valley floor, which is dotted with a large number of stone structures, including Iron Age features.

9.30 to 10.00 Enter a part of a valley that narrows: 'The Valley of Graves'. Visit several stone feature sites with standing stones (one is three meters high), stone alignments and platforms. A large horse enclosure of wood and stone is located on one side of the valley.

	
<p>View from Mogoiitiin hundi. Photo credit: Steve Brown</p>	<p>Standing stone. Photo credit: Steve Brown</p>

10.15 to 10.30 Visit a contemporary Muslim cemetery, which includes a c. 150 year old (second part of the XIX century), large, wood grave structure on the grave Ularaktyn-biy, the head of the Kazakh clan Kerey; a series of mud brick wall enclosures; and a small, recently constructed mosque.



10.35 Hill saddle with stone cairn.

10.40 Lunch beside Champan Lake. Extremely cold winds. Passed by a truck, motor bike, and dog – a nomad herder family moving to their winter camp.

11.35 Drive through a flat valley floor – High Mountain Steppe. Pass a number of nomad herder camps and fenced enclosures.



11.50 Hill saddle with stone cairn. We pass several stone structures after this.

	
<p>150-year-old tomb structure (wood). Photo credit: A. Rogozhinskiy</p>	<p>General view of Muslim cemetery. Photo credit: Steve Brown</p>

12.20 to 13.20 Stop at a large nomad herders winter camp where we are invited to share food. There will be a wedding here on Sunday and therefore the place was busy in preparing for the event.

13.30 Hill saddle with stone cairn. We enter the White River valley (c.2000m altitude), one of the largest valleys in the national park. We pass several large herds of stock (cattle, sheep, goats, horses, yaks).

13.50 Stop to view a large fenced (post and wire-mesh) enclosure established by the national park to grow saplings (Larch, Willow, Poplar) for use by nomads for their *ger*. There is a designated tourist camp in this area.

14.00 Drive through valley passing several nomad herder camps.

14.30 Stop. Alexey examines a ridge (beneath which is a *ger*), where he locates and photographs rock markings. This may be a previously unrecorded site.



15.00 First view of Shiveet Khaikhan, a locally sacred mountain.

16.00 Observe small shrine, possibly a Buddhist stupa, on low a hilltop in the distance. Cross two iced-over stream channels.

16.20 Note two separate *ovoo* comprising stone cairns with cloth strips tied to wood posts.

	
<p>Approaching Shiveet Khaikhan (centre back). Photo credit: Steve Brown</p>	<p>Crossing iced-over stream. Photo credit: Steve Brown</p>

14.35 to 17.45 Visit one small part of the UPPER TSAGAAN GOL COMPLEX (which extends over c.22km), set beneath Shiveet Khairkhan. For description see *World Heritage Site Nomination Document* (pp. 15-16). The area of engravings is located adjacent to, and above, a nomad herder camp. Alexey located an engraved symbol (a Turkin clan sign) at the base of a low ridge, nearby to the nomad herder's stock stable. It is a mark that indicates the location as a camping place for a specific family/group.

	
<p>Nomad herder camp and yaks. Photo credit: Steve Brown</p>	<p>Tamga: medieval Turkic clan sign indicating camp site. Photo credit: Steve Brown</p>

17.45 We share food with the resident nomad herder family. It is 65km from this place to our destination for the night.

18.00 Stop to observe a large group (c.100) of Ibex on the steep mountain slopes.

20.15 Cross wide, iced-over streams where the strength of the ice and depth of the water is uncertain. All good.

21.00 Arrive at home of Mr. R.Kukei (Ranger, Siilkhen Mountain National Park).<sup>16</sup> We eat a meal with the family.

**Friday 17 October**

9.00 Drive to TSAAGAN SALAA – BAGA OIGOR. For description see *World Heritage Site Nomination Document* (pp. 14-15). The part of this site (which extends over c.15km) that we visit is situated above an occupied nomad herder's winter camp. The focus of the visit is a visually spectacular panel (in terms of motifs and situation). The panel has some motifs which appear to have been recently re-engraved. The place includes 'modern-period' markings, including names with dates and 'copies' of old images.

10.20 We eat a meal with the nomad herder family. They show us equipment used by the matriarch's (who is in her 90s) husband in the practice of eagle hunting. We are also shown a Golden Eagle, held in one of the corals, which is currently being trained to hunt. The matriarch explains how she teaches children not to make new marks on the existing markings of the nearby rock art site. We are also shown wolf skins of animals hunted that threatened the livestock of the herders. The young man in the family used to be the Soum's best marksman.

11.30 Leave the nomad herder camp and rock art site to return to the ranger's home. We eat a meal at the ranger's home.

<sup>16</sup> The national park is administered by the Mongol Altai Range Special Protected Areas Administration and is located in Bayan-Olgii *Aimag* and Ulaankhus *Soum*.

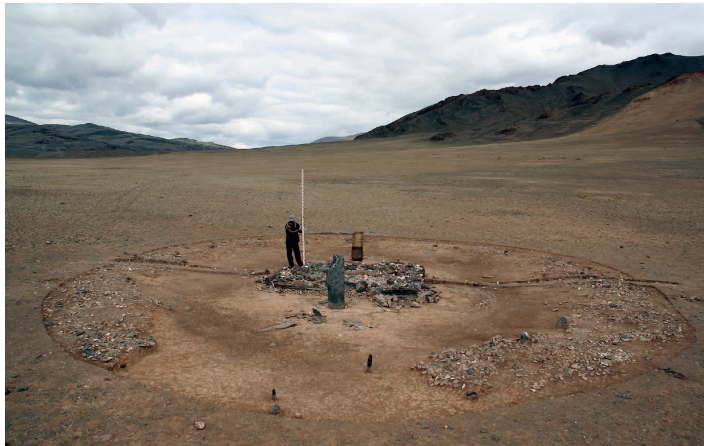
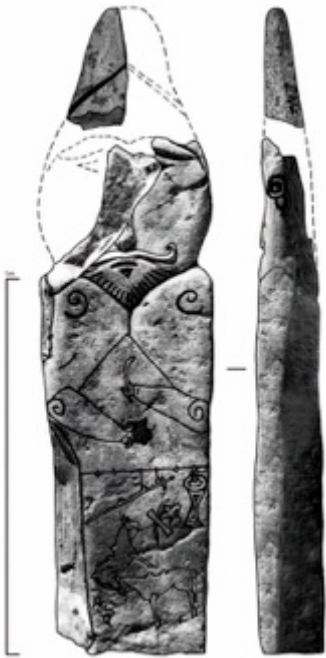


	
<p>Old and new rock markings. Photo credit: Steve Brown</p>	<p>Mr. Erdembileg and Golden Eagle. Photo credit: Steve Brown</p>

13.20 Soon after leaving the camp we visit a low hill beside the road on which is a small cairn and five Argali Sheep skulls. The animals were shot and placed here prior to 1991 (during the period of Soviet control of Mongolia).

13.30 Visit a Turkic medieval ritual complex Khar-Yamaat with one (or two) stone sculpture and many vertical stones (balbals). It is a stone feature (standing stone, platform and double alignment of stones extending more than 100m). The monument was excavated in 2007 by Russian, Korean and Mongolian archaeologists (Kubarev G., So, Tseveendorzh 2009: 427–435), and then (in accordance with the Mongolian archaeological regulations) the conservation of structure and landscape was completed. The standing stone is elaborately carved. Local people call it Chinggis Khan, though this is not the official name of the site. It is 150km from here to Olgii. Some soldiers on patrol come to check on us and then depart. On their way out they drive through (not around) the line of low standing stones that starts from the base of the sculpted stone and extends several hundreds meters to the east.



	
<p>Site with standing stone and platform. Photo credit: Steve Brown</p>	<p>Sculpted standing stone. Photo credit: Alexey Rogozhinsky</p>

	
<p>Excavation on Khar-Jamaat Site in 2007. Source: Kubarev G., So, Tseveendorzh 2009: fig.4</p>	<p>Reconstruction of sculpture including a fragment found during excavations in 2007. Source: Kubarev G., So, Tseveendorzh 2009: fig.1</p>

14.15 Visit a massive stone structure excavated in 2008 by a Russian/Mongolian archaeological team. This team did not have the necessary permits (they had permission from the Mongolian Academy of Sciences, but excavations have not been agreed with the administration of the Altai Park) and therefore the excavation was semi-legal and was stopped. The site has not been backfilled.

14.50 Pass by village.

15.30 Visit a second semi-legally excavated site, similar to the one we visited previously. It is located immediately amongst a maze of vehicle tracks. It has not been backfilled.

	
<p>Semi-legally excavated site. Not backfilled. Photo credit: Steve Brown</p>	<p>Camels. Photo credit: Steve Brown</p>

16.35 Stop at the boundary of Ulaankhus *Soum* marked by a large archway.

18.00 Arrive Olgii. Book into Duman Hotel.

20.30 to 21.30 After dinner we meet with Mr Atai for a final discussion. Key points:

- Discussion of the ‘Three-Party-Agreement’, which is an agreement between the Soum Governor, nomadic herders, and Bayan Olgii protected area administration.
- Discussion of park boundaries and a possible future WH nomination in relation to a possible trans-boundary nomination.
- Understaffing as an issue for the Altai Tavan Bogd National Park.
- The need for cultural heritage expertise within the Mongol Altai Range Special Protected Areas Administration.
- The need for further knowledge sharing between the Soum Governor, nomad herders, and border guards.
- The role of the Aimag-level Cultural Heritage Centre in heritage management. However capacity is often lacking at the Soum and Aimag levels. There was discussion on whether these responsibilities would be better allocated to the protected areas administration, but this proposal was not picked up in the process of revising Mongolia’s cultural heritage legislation. The result is a double layer of management, or at the very least a challenge for coordinating the efforts and resources available to both services.
- Education in schools for students and teachers. There are about 15 schools across seven Soum attended by children of the Aimag. Mr B.Chimed-Ochir made the statement: “Today’s kids are tomorrows herders.”<sup>17</sup>
- The need for brochures or hand-outs for target groups such as tourists, herders, school kids, etc.
- Mr Atai made the comment that it is not possible to separate nature and culture in modern people’s lives. He also said that any proposal or effort to remove nomadic herders from the park “would be a disaster.” The people have long histories of living in the current camp locations and there is a likely correlation between settlement sites and the location of rock markings.
- Bottom-up planning is the management approach most useful for Altai Tavan Bogd National Park because it is a ‘living landscape’. Local people are perceived to be the experts of their landscapes.
- The level of archaeological knowledge concerning the rock markings is ‘good’, but the park administration’s knowledge of the nomad herder’s perspective on the rock markings is ‘poor’.

### ***Saturday 17 October***

7.30 Depart hotel for Olgii Airport.

10.15 Flight MO-98 from Olgii to Ulaanbataar to (3-hour flight; Fokker 50).

13.45 Arrive Ulaanbataar. Picked up by WWF vehicle and transported to Ulaanbaatar Hotel.

15.30 to 16.30 Visit to Mongolian National Museum to view displays.

19.30 to 22.00 Team members meet to scope field report, share photographs and allocate writing tasks.

### **End of daily journal**

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<sup>17</sup> Almost all Mongolia’s Presidents have been from nomad herder families. The current President, Tsakhiagiin Elbegdorj, is from Altai (Khovd Aimag).