

Management Plan for the Rock Carvings in Tanum World Heritage Site



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World Heritage in Sweden

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Foreword

Tanum was inscribed on the World Heritage List in 1994. The reason is the large concentration of rock carvings with a rich and varied content of images found in this part of the province of Bohuslän.

Managing and protecting the Rock carvings in Tanum World Heritage Site is of crucial importance to ensure its survival and preservation for future generations. This management plan provides a guiding and strategic framework to ensure that the World Heritage Site continues to be preserved and managed in a long-term sustainable manner.

Through close collaboration between various stakeholders and based on knowledge, science, and societal engagement, this management plan has been developed to address the challenges and seize the opportunities facing the World Heritage Site. The plan aims to promote sustainable management and thus the preservation of the Rock carvings in Tanum while also highlighting the significance of the World Heritage Site for both the local and global communities.

The combination of conservation efforts, research, and public engagement ensures that the Rock carvings in Tanum remain accessible and a living cultural treasure that continue to inspire and enrich us all. Shared commitment and responsibility are prerequisites for us to continue caring for and preserving the area's outstanding universal values for future generations to appreciate and learn from.

The management plan for the Rock carvings in Tanum World Heritage Site has been developed by the World Heritage Site Management Council and presented to and accepted by the three parties jointly managing the World Heritage Site: the County Administrative Board of Västra Götaland, the Västra Götaland Region, and Tanum Municipality.

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Introduction

The Rock carvings in Tanum was inscribed on the World Heritage List in 1994, 30 years ago. At that time, there was no specific management plan required to be presented alongside the nomination; it wasn't until over ten years later that a "management plan" was mentioned as a document appropriate to develop ahead of nomination (Format for the nomination of properties for inscription on the World Heritage List). Unlike today, when the first management plan for the Rock carvings in Tanum World Heritage Site was developed, there were no clear guidelines for what a management plan should contain. It was preliminary and strongly focused on gathering knowledge and bringing the site to life. Around the turn of the century, a new plan was drafted and completed in 2005. With a vision and identified strategic focus areas, it essentially laid the foundation for the planning and organization that still applies and was originally formulated in the more action-oriented management plan developed for the years 2014–2018. This plan was later revised for the period 2019–2023.

In this, the fifth management plan for the Tanum World Heritage rock carvings, in effect from 2024, there has been a significant change in content. It has now been more clearly adapted to the guidelines on what should be included in a management plan for a World Heritage Site. Additionally, all fact-based text has been upgraded based on the current state of research.

The intention of the management plan for the Rock carvings in Tanum World Heritage Site is to serve as a basis for the preservation and management of the World Heritage Site, without excluding the possibility of developing the cultural heritage in an efficient and sustainable manner, while maintaining its values. The plan establishes goals and strategies for World Heritage management and is the platform used by the managing parties (the County Administrative Board of Västra Götaland, the Västra Götaland Region, and Tanum Municipality) to align their efforts and to enter the work

with the same conditions and expectations. Additionally, the plan should serve as an introduction to the concept of World Heritage in general and the Rock carvings in Tanum World Heritage Site in particular.

Since the management of the World Heritage Site will always be an ongoing process, this management plan does not have a predetermined validity period. Instead, it will undergo a review process every four years, and if the evaluation indicates the need for changes or additions, the relevant parts will be revised.

UNESCO and the World Heritage Convention

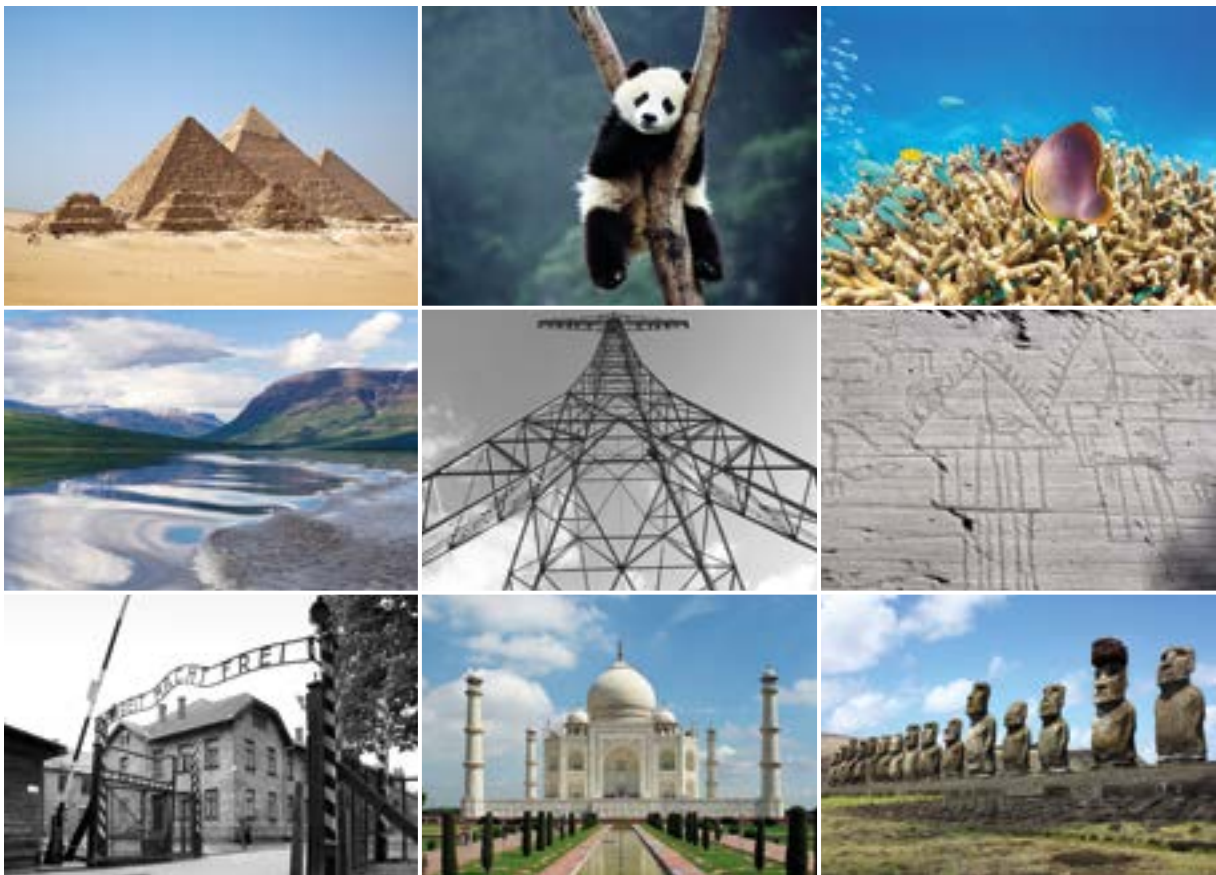
Throughout the 20th century, many cultural heritage sites were damaged in wars or threatened by increasing industrialization and urbanization. Between the two World Wars, the League of Nations began working to strengthen the protection of cultural landmarks. In 1945, at the end of World War II, the United Nations and UNESCO (United Nations Educational, Scientific and Cultural Organization) were established to continue this work, and in 1954, the Hague Convention was adopted to protect cultural property during wartime.

When Egypt began construction of the Aswan Dam in 1959, the Abu Simbel temples, built by Ramses II around 1200 BCE, were at risk of being submerged. Egypt and Sudan appealed to UNESCO for assistance. Following an international campaign, 50 countries contributed together with the \$80 million needed to relocate the temples. This rescue effort underscored the necessity of international cooperation in preserving humanity's cultural heritage. Today, Abu Simbel is part of the World Heritage Site "Nubian Monuments."

Together with the newly formed ICOMOS (International Council on Monuments and Sites), UNESCO developed a convention to protect the world's cultural heritage, and with the involvement of several environmental groups,



The Rock Carvings in Tanum World Heritage Site is located in northern Bohuslän.



Some examples from the World Heritage family that the rock carvings in Tanum are a part of. Photo above from left to right: *The Pyramids of Giza*, photo: Ricardo Liberato, *Sichuan Giant Panda Sanctuaries*, photo: unknown, *Great Barrier Reef*, photo: Workfortravel, *Putorana Plateau*, photo: Leshchenok Alexander, *Grimeton*, photo: Chrumps, *Val Camonica*, source: Shfa, *Auschwitz Birkenau*, photo: Xiquinho Silva, *Taj Mahal*, photo: Yann Forget, *Rapa Nui, Easter Island*, Photo: Arian Zwegers.

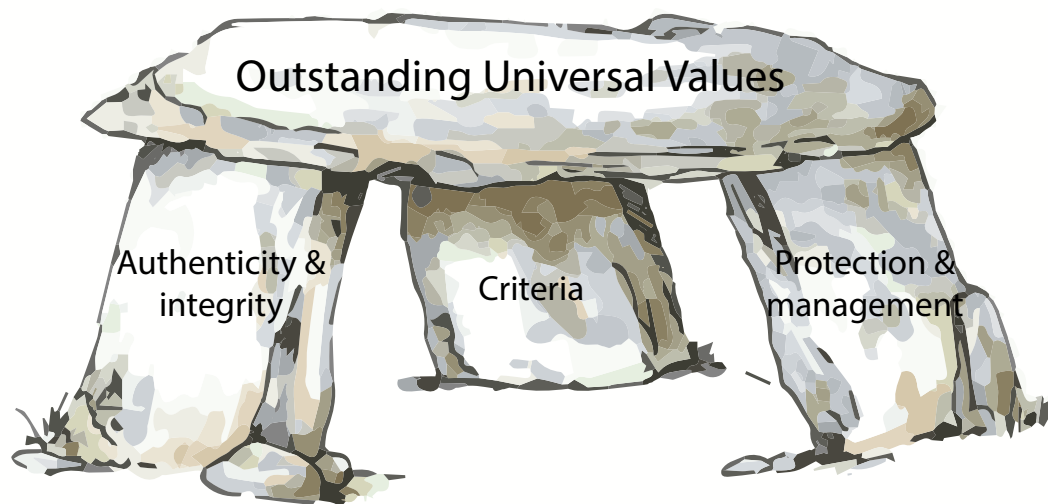
the United States advocated for natural heritage to also be included in the convention. Nature and culture are sometimes seen as opposites, but in the eyes of the convention, they hold equal value. Heritage doesn't necessarily have to be ancient, it can also include contemporary remains that represent significant phases in human history.

When the World Heritage Convention was adopted in 1972 in Paris, a fundamental idea was that there are sites of universal value to all people worldwide, and together we should work to preserve our world heritage for future generations. The concept of World Heritage is not only about protecting the Earth's unique cultural and natural treasures but also about fostering mutual respect and solidarity among people, cultures, and states. The United States was the first country to sign the convention in 1973, and it entered into force in 1975. The convention has been signed by 194 states (as of 2020). Sweden signed it in 1984.

The task of implementing the World Heritage Convention falls to the World Heritage Committee. The Committee meets annually and consists of 21 members from an equal number of countries, elected for a six-year term. The World Heritage Centre in Paris organizes the work of the Committee. The Centre also manages new nominations to the World Heritage List and monitors the status of sites already listed. As advisory bodies on World Heritage matters, there are the aforementioned ICOMOS, the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), and the International Union for Conservation of Nature (IUCN). ICOMOS and ICCROM handle cultural heritage, while IUCN deals with natural heritage.

How does a World Heritage Site come about?

There are three types of World Heritage Sites: cultural, natural, and mixed. The latter contains



The Outstanding Universal Value of World Heritage sites is based on the fulfillment of one or more criteria, their authenticity and integrity, and the need for protection and management. Illustration: Mossa Hulebäck.

both natural and cultural values. Places or phenomena nominated for the World Heritage List should possess Outstanding Universal Values (OUV) that are deemed so significant that they concern not only the country they are located in, but all of humanity.

It is the State Parties (the nations that have ratified the convention) that nominate World Heritage Sites. The nominations are assessed by UNESCO and its expert bodies, and decisions are made by the World Heritage Committee.

A site's outstanding universal values are assessed based on ten criteria. These criteria can be seen as a definition of what constitutes cultural and natural heritage in a World Heritage perspective and in what way these phenomena should stand out to be of universal value. The first six criteria apply to cultural heritage, and the remaining four apply to natural heritage. To be included on the World Heritage List, one or more criteria must be met. The World Heritage criteria are listed in Appendix 1.

Two important concepts in the context of World Heritage are authenticity and integrity. Authenticity concerns genuineness and credibility. As different cultures perceive authenticity differently, it is important that the assessment of a World Heritage Site's authenticity is made based on the cultural context from which the heritage originates. Authenticity is a concept used solely concerning cultural heritage.

The concept of integrity is used for both

cultural and natural heritage. It is a measure of how intact the World Heritage Site is deemed to be, that all the aspects that give the area its particular value are within the boundaries of the World Heritage Site and that all these aspects are in good condition.

The nomination process, the World Heritage criteria, and how authenticity and integrity should be assessed are described, along with many other central World Heritage concepts, in the Operational Guidelines for the Implementation of the World Heritage Convention. It contains instructions to the signatory states on how World Heritage work should be carried out in practice.

Statement of Outstanding Universal Values

The cultural and natural values that justify a site being included on the World Heritage List are described in a "Statement of Outstanding Universal Values" (SOUV). In addition to detailing which criteria for World Heritage designation have been met, there is a brief summary of the site's values as well as descriptions of the site's authenticity, integrity, and requirements for protection and management efforts. The Statement of Outstanding Universal Values for the Tanum rock carvings was adopted retrospectively by UNESCO's World Heritage Committee in Krakow in 2017. Tanum's SOUV is available in Appendix 2.

Rock Carvings in Tanum – a World Heritage Site

The Rock carvings in Tanum World Heritage Site is located in Tanum Municipality in northern Bohuslän. The area covers approximately 41 square kilometres. Within the area, there are around 750 different property owners, with just under 700 being private individuals and the remainder being comprised of businesses, Tanum Municipality, and other organizations.

The World Heritage Site comprises five visitor areas: Fossum, Vitlycke, Aspeberget, Litsleby, and Kyrkoryk/Sotetorp. These sites are equipped with parking, marked trails, and other facilities to improve accessibility, along with information signs. The World Heritage Site's visitor centre is located at Vitlycke.

The reason Tanum was inscribed on the World Heritage List in 1994 is the large quan-

tity of rock carvings from the Bronze Age (1700–500 BCE) found in the area. The entire region of Bohuslän is rich in rock carvings, with the highest concentration located in the northern part. Tanum is the area with the highest concentration of rock carvings and where the imagery offers an unusually rich diversity.

The Tanum rock carvings meet three of the World Heritage criteria: I, III, and IV. The first criterion signifies it should be a masterpiece of human creative genius. The third is that it should bear a unique or exceptional testimony to a cultural tradition or to a living or lost civilization. The fourth criterion is to be an outstanding example of a type of building, architectural or technological ensemble, or landscape that illustrates one or more stages of human history.



Rock carving of a ship with warriors in the crew. The carving can be visited at the Fossum panel, one of the World Heritage area's most prominent rock art sites. Photo: Hans Lundenmark.

Descriptions of the criteria in Tanum are as follows:

Criterion I – The rock carvings of the Tanum region constitute an outstanding example of Bronze Age art of the highest quality.

Criterion III – The range of motifs on the Tanum rock carvings provides exceptional evidence of many aspects of life in the European Bronze Age.

Criterion IV – The continuity of settlement and the ongoing practice of agriculture, as illustrated by the Tanum region's rock carvings, archaeological vestiges, and modern landscape features, combine to demonstrate a remarkable permanence during eight thousand years of human history.

World Heritage Area

8,000 years ago, the sea level was approximately 50 meters higher than it is today, and much of the World Heritage area was underwater. There was only mainland in the eastern parts with a few islands in the north and south; the rest of the area was essentially open sea. The landscape resembled today's barren outer archipelago.

At the beginning of the Bronze Age (around 1700 BCE), the shoreline was 16–17 meters higher than it is today. The World Heritage area still had contact with the sea – the Tanum Plain was the innermost part of the archipelago, accessible from the south. By the end of the period, the sea remained in the southern part of the World Heritage Site, but the shoreline was only nine meters higher than it is today. Many of the rock panels used for rock carvings were located in coastal areas, but there are also carvings on rocks located far from the sea. Regardless of their location in the landscape, the carvings were made where people moved around, either on water or land. It was important that the panels used were visible in the landscape.

Today, most of the rock carving sites are found on the border between the hillier parts of the landscape and the flatter open farmland. The largest concentration is along the western edge of the Tanum Plain, in the northeast at Fossum, and in the south at Kalleby.

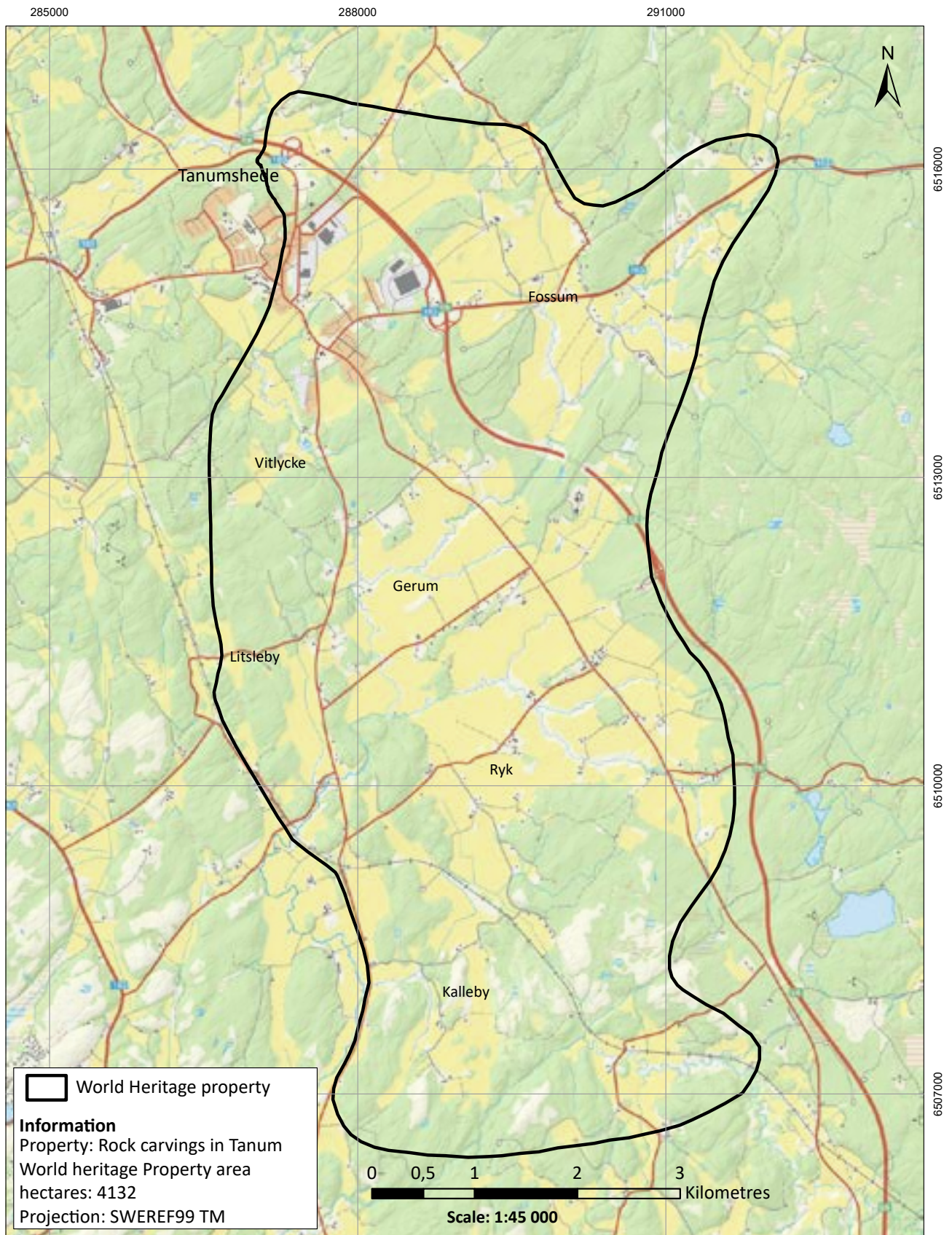
The area contains burial grounds from various periods of antiquity, from the late Stone Age to the Iron Age. The only dolmen in the area is located in the northern part near Tanum church. The Bronze Age cairns contemporary with the rock carvings are located on the peaks of the Bohuslän mountains; there are a total of 33 cairns in the World Heritage area. Further down in the landscape, and sometimes directly adjacent to the rock carvings, are Iron Age graves, marked by mounds, stone settings, and standing stones.

Traces of ancient settlements in the World Heritage Site are older than the graves. In the northern part of the area, there are settlements from the Mesolithic period dating back to 6,500 BCE, remains of the World Heritage Site's first known inhabitants. The majority of the known settlements are found to be located in a strip from southeast to northwest, this is partly because archaeological surveys and excavations have been conducted there in connection with the rerouting of the E6 highway, but also because the most favourable places for agriculture are found there.

During the Iron Age, the area loses its connection to the sea, more land is grazed or ploughed, and the agricultural landscape we have today begins to take shape. The countryside was divided into enclosed fields and commons. The enclosed fields consisted of fields, meadows, and pastures, while the commons were located further from the farms and were utilized for grazing, hunting, and forestry. The early Middle Ages saw the clearing of new land and the construction of new farms. Additionally, farms were gathered into villages, but still in the same locations where settlements were located during the Bronze and Iron Ages.

Most of the forests were cleared during the 17th and 18th centuries. The timber was used for building ships and as fuel for the coastal saltworks and tar kilns. The enclosure reforms of the 18th and 19th centuries divided farms and consolidated the land holdings. Stone fences were built to mark the new property boundaries, and areas that had previously been meadows and commons were converted into cultivated land. By the 19th century, almost

UNESCO World Heritage Rock Carvings in Tanum



©The Swedish Land Survey ©National Heritage Board of Sweden

The official map of the inscribed property.

the entire Tanum Plain was cultivated, and the mountain areas were completely barren.

In the early 20th century, spruce forests were planted on the commons that had previously been used as pastureland, and over time, the landscape began to regenerate. This led to the creation of today's landscape, with cultivated fields on the Tanum Plain and forest-covered mountains surrounding it. Modern-day humans have also left their mark on the landscape: multiple versions of the European Route E6, Tanum Teleport with its white satellite dishes, residential developments at Vinbäck, the industrial area at Storemyr, and Tanums shopping centre in eastern Tanumshede, as well as wind farms located just outside the World Heritage area to the west, north, and east.

Description of Tanum's World Heritage Criteria

This chapter describes and explains the World Heritage values of the Tanum rock carvings based on the criteria in the SOUV. Additionally, the attributes of the area are described, which are the components or characteristics that together constitute the outstanding universal value of the World Heritage Site. The criteria explain why the site is a World Heritage Site, while the attributes are what should be preserved and protected to maintain the particularly significant universal values.

Highest Quality Bronze Age Art

Rock carvings are images that were pecked into the rock during the Bronze Age and the beginning of the Iron Age, from 1700 to 300 BCE. "Carving" is actually a misleading term; the images were hammered into the rock using pounding stones. The tools used for this purpose can sometimes be found during archaeological excavations near the rock panels. Everyday life is rarely depicted; rather, the images seem to relate to power, ritual, long-distance journeys, and ideals of warfare.

Despite there being hundreds of thousands of individual rock carvings, the motifs are quite limited. The most common are the dots known as cup marks; other common images include

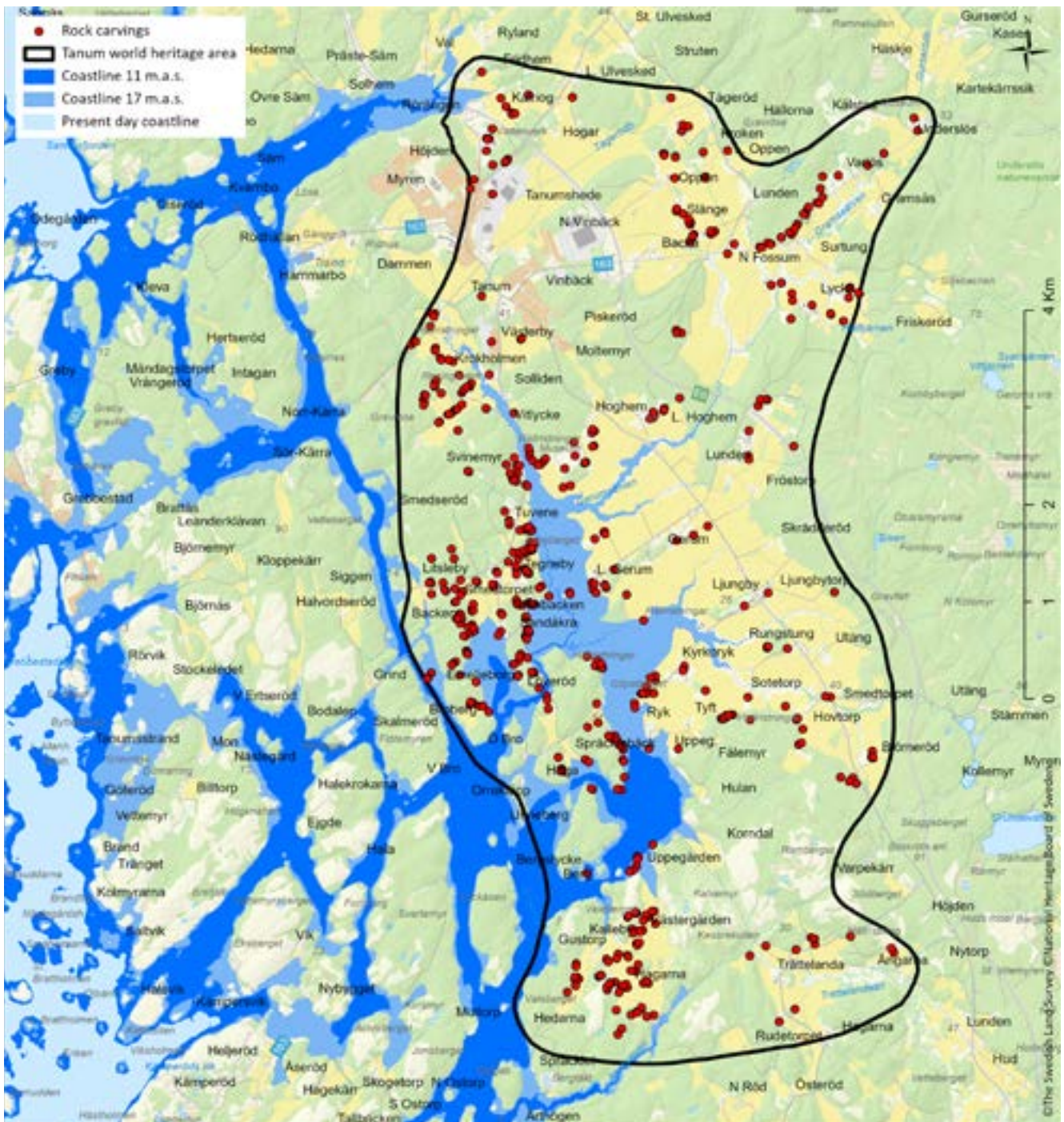
ships, humans, and animals. Less common motifs include footprints, circles, wagons, trees, ard (a predecessor to the plough), hands, net figures, and weapons.

The rock carvings in Tanum are part of the so-called South Scandinavian rock carving tradition. What sets the images in Tanum apart from the rest of the material is the richness of variation and detail in the motifs. There are many examples of images so clear that specific types of Bronze Age objects can be identified. This primarily concerns different weapons and equipment details such as swords, axes, helmets, and shields. Other examples include adornment and construction details of the ships: prow decorations, steering oars, frames, ribs, and crew members with paddles, weapons, and musical instruments.

Remarkably, the tradition of carving images into the granite rocks has been enduring. In some places, generation after generation has returned to fill the panels with their contemporary variations of motifs for over a thousand years. This endurance has also resulted in a vast number of rock carving sites - in the World Heritage area, there are currently over 600 known rock carving sites, a number that continues to grow as more panels are discovered. In total, there are tens of thousands of individual rock carvings.

The granite bedrock itself is central to the rock art in Tanum. The rock carvers of the Bronze Age seem to have found the polished rock surfaces irresistible. Many of the rock carving surfaces in Tanum are exceptionally smooth, providing conditions for great detail and intricate motifs, despite the images being hammered into the rock with pounding stones. In the southern part of Bohuslän, where the bedrock consists of coarser gneiss, there are indeed rock carvings, but rarely of the same quality and never in the same quantity.

The visual world of the Scandinavian Bronze Age is found, aside from on the rock carvings, solely as decoration on bronze objects from the period. One particular type of object, known as a razor, is often adorned with images of ships and animals. However, compared to rock carv-



The map shows the World Heritage area with the known rock carving sites marked, along with the shoreline today as well as during the early and late Bronze Age.

ings, the motifs are limited. The similarity in the imagery on these objects and on the rocks is one way in which the rock carvings can be dated to the Bronze Age. A parallel aesthetic expression is found in the decorative concepts present on a broader range of bronze objects from the Bronze Age – jewellery and weapons adorned with star, wave, and circle patterns. There is overlap between the rock carvings and these more decorative elements, but it is limited.

Testimony of Life in the European Bronze Age

The first criterion concerns the artistic qualities of the rock carvings, while the second explains why the images are interesting and how we can learn about our history through them.

The rock carvings in Tanum and Bohuslän are part of the South Scandinavian rock art tradition, but they also reflect a larger European cultural context. The Bronze Age, the period



The carvings at Sotetorp are among the finest and best-preserved in the World Heritage area. This is one of many examples - the motif is a ship with full- and half-figure people, crew lines, and rows of cup marks. Above the ship, a so-called vaulter is performing a backflip. Photo: Hans Lundenmark.

primarily associated with the rock carvings, was characterized by extensive use of the copper alloy bronze in weapons, jewellery, and other items. It was a time of cultural development and increased contacts with the European mainland and the British Isles.

The driving force behind this increased interaction with the outside world was Scandinavia's lack of copper and tin deposits that could be exploited. To access bronze, which could be considered a pivotal metal for society, trade was necessary. Analyses of bronze found in archaeological contexts show that the mines where copper was extracted were located in the Mediterranean area, such as Cyprus, present-day Spain, and Central Europe. Tin, the other component in the alloy, often came from Cornwall in the United Kingdom.

Trade not only involved the exchange of goods but also the influx of new ideas and cultural influences, reflected in the rock carving motifs in Bohuslän and Tanum. Examples include warriors with horned helmets, a motif found only in Scandinavia and the western Mediterranean during the Bronze Age. The

Bohuslän's rock carvings depict two-wheeled chariots that are nearly identical to those found on Spanish rock carvings. Spanish gravestones depict shields that resemble shield depictions in Bohuslän. During the latter half of the Bronze Age, much of the copper came to Sweden from the Austrian Alps. At this time, the duck was a popular motif in the Alpine region, something that seems to have influenced the Bohuslän rock carvings.

These similarities indicate that life in Bohuslän and Tanum was part of a Europe characterized by trade, long-distance travel, and cultural exchanges. They also show that Bronze Age society in what is now the World Heritage area was structured in a way that facilitated these contacts. The abundance of images of ships, warriors, and status symbols such as weapons and two-wheeled chariots presupposes a hierarchical society where an elite had significant resources.

However, it is not the case that everyone living in Tanum during the Bronze Age embarked on long-distance journeys, quite the opposite. There is not as much documentation of domestic life, although there are images of livestock and agri-



Map showing possible trade routes for metals to Scandinavia and Tanum during the Bronze Age with the major European copper and tin deposits marked.
Base map: Mapswire.com CC-BY 4.0.

culture. Motifs such as residential buildings or people performing everyday tasks are completely absent from the rock carvings.

Many researchers see the rock carvings as more than just contemporary documentation. They are believed to have played an important part in rituals and can be seen as a glimpse into the mythological fabric of the time, telling us much about how the people of the Bronze Age understood the world they lived in.

Continuity in Settlement Patterns and Land Use

Contemporary residents of Tanum live and operate in the same locations in the landscape as their ancestors have done since the area emerged from the sea after the last ice age. Thus, today's traditional settlement patterns are a clear echo of where people settled from the time of the rock carvings onwards. The oldest traces of human activity are over 8000 years old and were found just outside present-day Tanumshede. From the Bronze Age and throughout history, people in the area have lived in the shelter of the mountains, in what was neither mountain nor valuable agricultural land but small hilly areas between mountainous terrain and farmland. The traces of these people are many. In addition to the rock carvings, there are numerous ancient settlements and areas with graves from throughout all of prehistory.

With the introduction of agriculture, the low-lying areas closest to the former seashore began to be used for grazing, while cultivation took place in the more elevated areas with sandy soils surrounding the plain. With the introduction of the iron plough, combined with the old seabed becoming available for farmers to use, the heavier clay soils began to be cultivated while grazing animals took over the more elevated areas. The agricultural landscape we have in the World Heritage area is thus the result of thousands of years of farming that continues to this day.

The open cultural landscape resulting from past and present agriculture allows us to understand what Tanum looked like during the Bronze Age. The area was also open then, but

instead of farmland, the landscape was dominated by coastal meadows and shallow bays. There is much evidence to suggest that the rock carvings, or at least the sites where the rock carvings were made, would have been highly visible in the landscape. The content and purpose of the rock carvings are strongly linked to the landscape they were created in - the better understanding we can gain of the landscape of the past, the better we can understand the rock carvings.

Even today's road network provides us with a picture of how the landscape was used during the Bronze Age - many rock art sites are located along roads that are still in use. The best example of this is road 163 in the northeastern corner of the World Heritage area, where 40 rock art sites are lined up along the road for a two-kilometre stretch. This is a route where people have travelled for at least 4,000 years.

Attributes of the Tanum World Heritage Site

The attributes of the World Heritage Site largely correspond to the expression of national interest areas for cultural heritage management in Tanum. The first attribute, "rock carvings," is by far the most significant and underpins all three World Heritage criteria. The four other attributes should be seen as supporting elements in the fourth criterion to describe both the contemporary and ancient landscape, and the context in which the rock carvings are situated.

Rock Carvings – from the Bronze Age (1700–500 BCE) and the early Iron Age (500–300 BCE). In the area, there are over 600 known sites, ranging from monumental rock panels with hundreds of images to places with individual cup marks.

The Open Cultural Landscape – Tanum's plain and the open areas near Oppen, Fossum, and Kalleby are central to this attribute. An open landscape is essential for maintaining the visual connection between archaeological remains and the surrounding landscape. This is particularly relevant to the rock carvings, which were likely intended to be highly visible. The proximity of the rock carvings to the open agricultural landscape



Today's Tanum residents, in the form of students from the World Heritage Preschool, are participating in an archaeological excavation of a Stone Age settlement ahead of the construction of the new E6 highway. Photo: Christina Toreld.

also facilitates understanding of the location of the panels near the Bronze Age sea levels.

Other Archaeological Sites – in addition to rock carvings, the area is rich in graves; there is a dolmen from the Neolithic, elevated coastal cairns from the Bronze Age and Iron Age, and Iron Age burial grounds. Settlements range from the Mesolithic to the Iron Age. Other common archaeological sites include village or farmstead sites, cottage remains, fossilized farmland, and ancient hill forts.

Location of Settlements – traditional farmstead locations are on ridges and slopes. The names of settlements and proximity to burial grounds suggest origins in the Iron Age. The settlements are small-scale, and their placement maintains visual and functional connections with surrounding farmland and road networks.

Modern Landscape Features – the communication system with the 17th-century national north-south King's Road, as well as European Route E6 and the local east-west road network. Remains of 19th-century cottage expansion with house foundations, stone walls, and arable land, as well as traces of 19th and 20th-century quarrying.

Authenticity and Integrity

Authenticity in the context of World Heritage concerns genuineness and credibility. In the case of Tanum, it means that it can be confidently stated that the rock carvings are from the Bronze Age and are located in the same landscape as when they were created. The content and appearance of the images are typical of the time period they originate from. This has been confirmed by scientific studies of the carvings themselves and comparative typological studies of dated Bronze Age art on other archaeological objects, as well as direct comparisons with contemporary objects. Any remains of rituals or other activities at the rock carvings are, in most cases, undisturbed. The placement of the rock carvings in a landscape shaped by millennia of agriculture enables an understanding of their proximity to the sea level of the Bronze Age. These characteristics enhance the authenticity of the area.

Integrity is a measure of how intact a natural or cultural heritage is deemed to be. Tanum's rock carvings are, in many cases, very well-preserved, although there are sites that have been damaged by weathering. The area generally does not suffer from any negative effects of exploita-

tion or neglect. The 41 square kilometre area contains over 600 known rock carving sites, as well as a large number of settlements and graves from prehistory, ranging from the Mesolithic to the Iron Age. The extent of the World Heritage Site thus provides a comprehensive picture of the outstanding universal values on which the World Heritage Site is based.

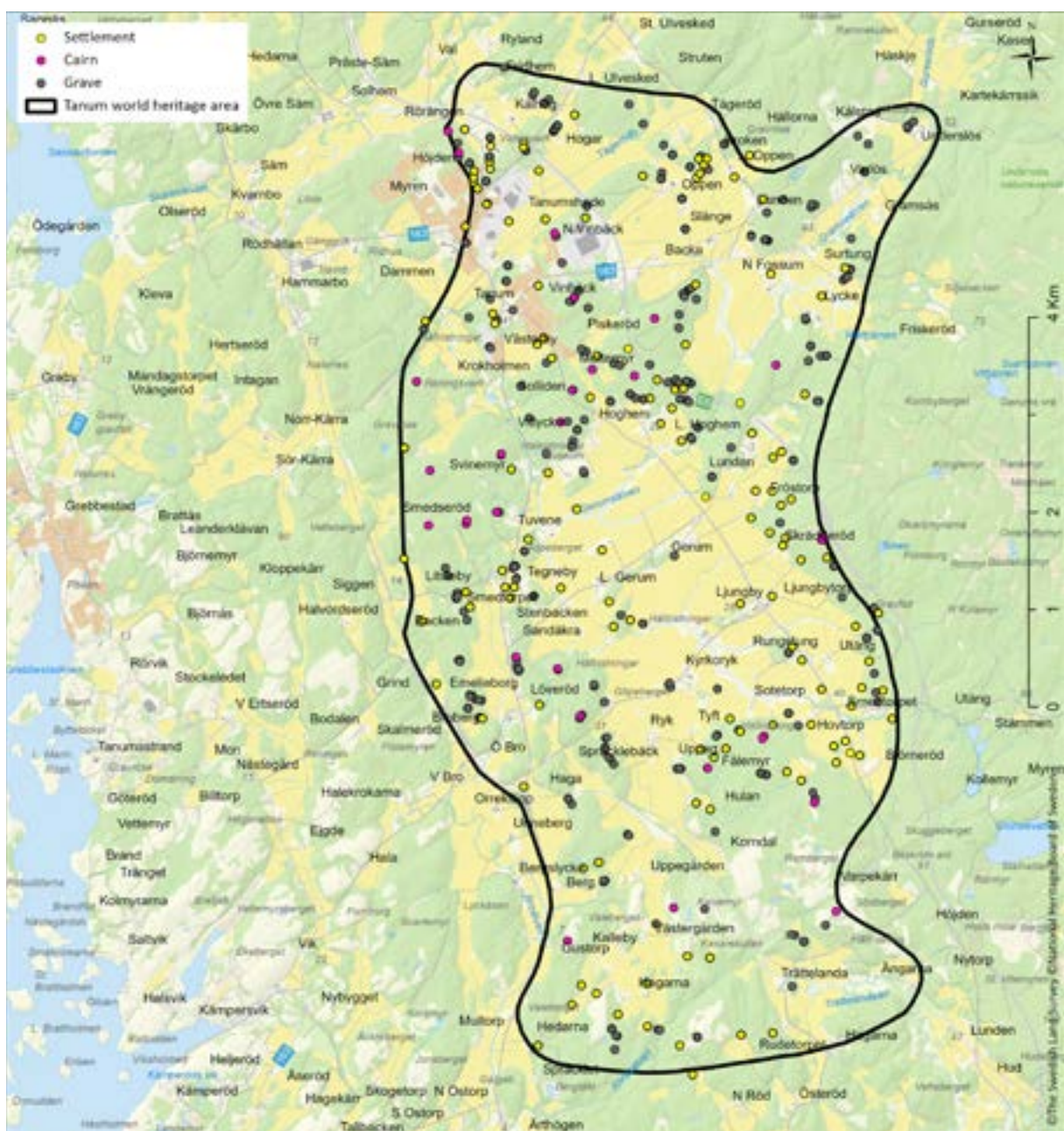
State of Conservation

The fundamental purpose of World Heritage is to preserve the common cultural and natural values of humanity and the Earth. All manage-

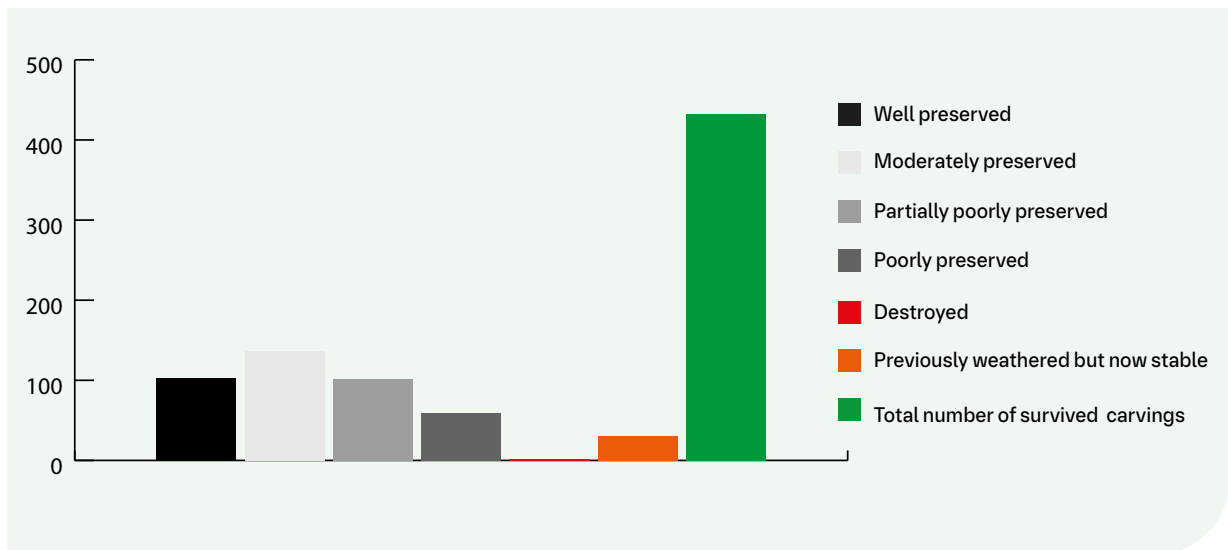
ment efforts, requirements for legal protection, and efforts to convey and integrate World Heritage into contemporary society aim to future-proof these heritages so that future generations have the means to continue this work. Therefore, knowledge of and description of the conservation status and the threats and risks involved are of central importance.

Condition of the Rock Carvings

The conservation status of the rock carvings within the World Heritage Site varies greatly. A damage survey of all figurative rock carvings



The map shows the World Heritage area with settlements, cairns, and other graves marked. Cairns are generally dated to the Bronze Age, while the other ancient remains come from across prehistory.



Damage assessment 1994–1995. "Previously weathered but now stable" means that the rock carving has been subjected to chemical weathering where the upper layer has eroded away through granulation and flaking, but the weathering has ceased at the time of assessment.

and major cup-marked rock surfaces carried out in 1994-1995 indicates that less than 25 percent have an unaffected surface. A total of 432 rock carving sites were surveyed with associated sub-numbers based on the distribution and intensity of various weathering processes and damage caused by humans.

In the autumn of 2006, a follow-up was conducted on 33 large and small rock carving sites. The aim was to find out if the damage situation had changed over the ten years since the initial survey. To obtain as broad an overview as possible, the rock carvings were selected based on various characteristics such as surrounding and local environments, type of granite, different types of damage, various weathering types, and damage caused by human activity.

Of the 33 rock carving surfaces examined, visible deteriorations were observed on three surfaces due to flaking and graveling weathering. However, the most notable change was the rapid expansion of cyanobacteria on several of the selected rock carvings.

Weathering and Other Threats to the Rock Carvings

The World Heritage rock carvings are constantly exposed to various influences and risks, some of which can lead to lasting damage.

The resilience of the rock depends on factors such as mineral composition, degree of transformation, exposure, biological activity, salt, and temperature fluctuations. The rock surface where the rock carvings were made undergoes a continuous natural and slow degradation process. Rocks formed deep within the Earth become unstable upon contact with the atmosphere, driving weathering processes that break down minerals and rocks and transform them into products that are in equilibrium with the new conditions.

The degradation processes of rocks are complex and can be divided into three different subprocesses: chemical, physical, and biological weathering. Chemical weathering involves changes in the chemical composition of the rock, with some minerals dissolving while others remain. Factors such as the chemical composition of precipitation and the water-soluble substances in the air, such as sulphur, affect the rock over time.

Physical weathering refers to material being removed from the rock surface without any chemical change. Harmful physical factors include freezing point transitions when the surface is moist, cyclic solar heating and cooling, fluctuations between moisture and drought in salt environments, and frequent human interventions, such as cleaning the rock surface.



Biological weathering is a collective term for the physical and chemical weathering initiated by microorganisms and then enhanced by various types of plants and animals, including humans. Biological growth in the form of lichens, algae, and other vegetation causes dissolution of the rock's minerals, root damage, and mechanical abrasion. Humans can damage the rock through carelessness, such as burning or cleaning the rock surface with various chemicals.

However, it's not just weathering that poses a risk to the rock carvings. During the aforementioned damage survey, other potential threats on or in the immediate vicinity of the rock carving surfaces were also registered, for example, the degree of solar exposure, biological growth, water seepage, and crown drip from trees. More than 60 percent of the surveyed carvings were assessed to be threatened by such factors.

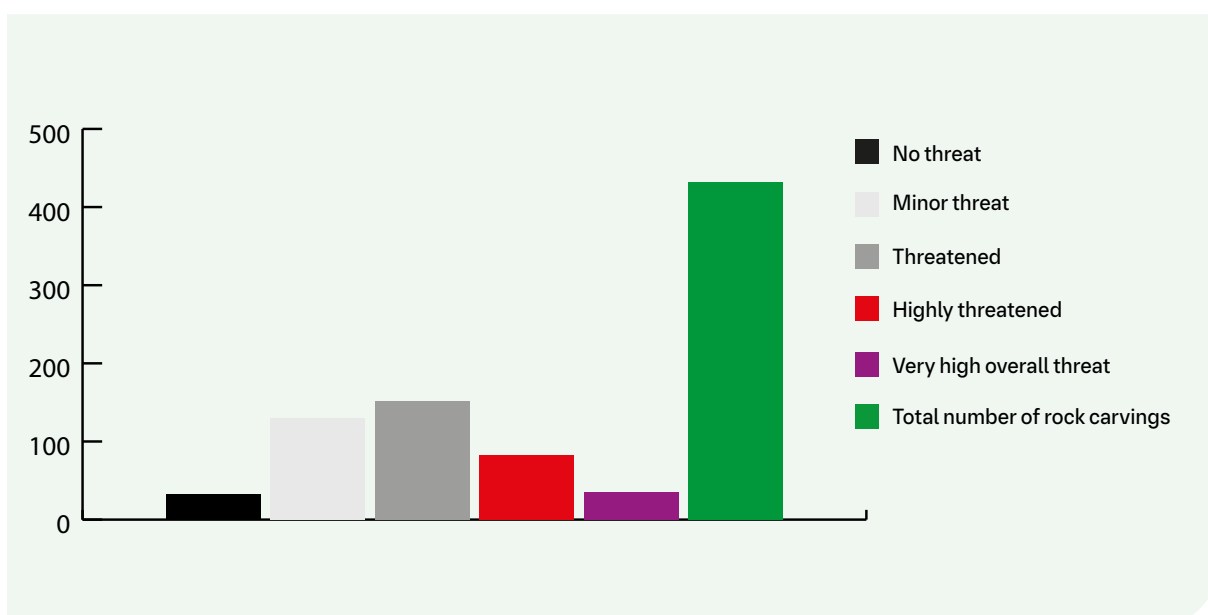
Measures to Counteract Weathering and Other Threats

The conducted damage inventories of rock carvings in the World Heritage site clearly indicate a need for efforts to slow down or prevent weathering, as well as to reduce other types of threats. Therefore, the management of the World Heritage site includes several different measures aimed at this.

A general rule in the maintenance and care

of rock carvings is to limit interventions on the actual rock carving surface and primarily find solutions by changing the surrounding environment through so-called indirect measures. Examples of such measures within the World Heritage site include the removal of trees near the rocks, clearing of brush and grass around the rock carvings, diversion of water, and construction of ramps and stairs to prevent wear by preventing visitors from walking on the carvings. In some cases where the carvings have acute weathering damage and/or heavy biological growth, direct measures on the rock carving surface are required, such as permanent or seasonal covering to stop or at least slow down weathering and ethanol treatment to remove biological growth. Various forms of repairs may also be necessary.

The simplest and most cost-effective way to prevent degradation and simultaneously remove biological growth is to seasonally cover the rock carvings and divert runoff water. Within the World Heritage site, such covering occurs partly on rock carving surfaces at the prepared visitor sites and partly on rock carvings located adjacent to salt-treated roads. If the biological growth of cyanobacteria, algae, and lichens is severe, the rocks are also treated with a 50-70 percent ethanol solution that kills the biological growth.



Evaluation of threat perception during damage assessment 1994-1995.



Comparison of the landscape at Vitlyckehällen in 1911 and today.
Photo to the left: Lauritz Baltzer. Photo to the right: Hans Lundenmark.

The Landscape

The landscape of the World Heritage site offers a diverse nature and cultural geography experience, primarily shaped by ongoing agriculture and forestry. The Tanum Plain and other open landscape areas with long vistas, combined with the forested mountains, play a crucial role in understanding and interpreting the 8000-year-old development that is one of the cornerstones of the World Heritage site's values. Therefore, continuous agriculture is of great importance to maintain the landscape as the significant factor it is in the justification for the World Heritage status.

The use of the landscape simultaneously leads to a gradual change in the landscape, which is a historically documented fact. The causes can be varied, including changes in natural conditions and societal reforms. However, when changes occur rapidly, they can easily become a threat to the landscape.

The open agricultural landscape is vital for the Tanum's rock carvings anything that could rapidly impact this image negatively could be a threat. Currently, a sudden change in agricul-

tural practices is unlikely, but a rapid transition with increased overgrowth would undoubtedly impact the ability to experience the rock carvings in their prehistoric landscape settings. Additionally, large-scale developments that consume significant amounts of land, such as wind turbines, solar parks, major industrial establishments, and infrastructure like highways, could pose a threat to the World Heritage landscape. The alignment of the E6 highway through the World Heritage site is an example of the latter. In this case, the threat to the World Heritage site was mitigated through careful project planning with the goal of finding an acceptable route.

With the support of existing legislation, especially the Environmental Code and the Planning and Building Act, it is possible for authorities such as the County Administrative Board and the municipality to prevent serious threats to the World Heritage site from becoming a reality. For example, Tanum municipality has included specific recommendations in its comprehensive plan aimed at promoting the long-term preservation of the World Heritage site's values.

Protection and Management of the World Heritage Site

Every country that ratifies the World Heritage Convention commits to maintaining a well-functioning system for protection and management to the extent possible. This system includes both legislation and ensuring adequate scientific, technical, economic, and administrative resources. The protection of the World Heritage site should also be integrated into overarching planning programs. The aim is to, as stated in the convention, "ensure that effective and active measures are taken for the protection, conservation, and transmission of the cultural and natural heritage located within its territory."

Legislative Protection

Sweden does not have specific legislation for World Heritage sites. The state has determined

that existing Swedish legislation is sufficient to protect the World Heritage sites within the country's borders. The legal protection of World Heritage sites is mainly governed by the Cultural Heritage Act (SFS 1988:950), the Environmental Code (SFS 1998:808), and the Planning and Building Act (SFS 2010:900). These laws regulate the protection of cultural monuments and cultural environments, the use of land and water areas, and urban development.

Ancient Monuments and Cultural Environments

The preamble paragraph of the Cultural Heritage Act states: "It is a national concern to protect and preserve the cultural environment. The responsibility for the cultural environment



Rock carvings and other ancient remains are protected by the Cultural Heritage Act. The image shows rock carvings at Fossum. Photo: Hans Lundenmark.

is shared by everyone. Both individuals and authorities must show consideration and care for the cultural environment." (Chapter 1, Section 1)

Ancient monuments are protected under the Cultural Heritage Act (Chapter 2) and are defined as "remains of human activity from ancient times, which have been created through the practices of older times and are permanently abandoned." To be directly protected by the law, remains must belong to one of the listed types of remains and, in addition, be presumed to have been created before 1850.

Both known and unknown ancient monuments are protected. This means that if an ancient monument is discovered, it has the same protection as an already registered ancient monument. Protection entails that it is prohibited to alter or damage an ancient monument. In practice, this means that anyone wanting to construct a building or other structure needs to contact the County Administrative Board for consultation and, if necessary, apply for permission.

As of August 21, 2024, there were 1003 legally protected ancient monuments in the Tanum World Heritage area, of which 596 were rock carvings. Sweden's ancient monuments are registered in the Cultural Heritage Registry, which is searchable for the public through the National Heritage Board's search service Fornsök.

National Interest

Provisions regarding national interests are found in the Environmental Code, whose overarching purpose is to "promote sustainable development that ensures a healthy and good environment for current and future generations." (Chapter 1, Section 1)

National interests are geographical areas considered to have nationally important values. These values can be natural and cultural, but also areas important for exploitation or economic activities, such as wind power or reindeer husbandry. National interests are to be protected against measures that harm their values or the possibilities of using them for their intended purpose. However, national interest

only becomes relevant when someone wants to change land use in a way that requires assessment under, for example, the Environmental Code; during ongoing land use, the provisions have only advisory function.

Since 1987, the ancient monuments within the Tanum World Heritage Site have been part of an area of national interest for cultural heritage conservation. The current claim consists of three former areas of national interest merged in 1997, when the boundaries were revised in relation to the World Heritage Site delineation. The geographical area of national interest for cultural heritage conservation largely covers the World Heritage Site but is slightly expanded in the east and west. The description of national interest was revised in 2016.

Comprehensive Plan

Provisions in the Planning and Building Act aim to "with regard to individual freedom, promote social development with equal and good social living conditions and a good and long-term sustainable living environment for people in today's society and for future generations." (Chapter 1, Section 1)

According to the Planning and Building Act (Chapter 1), each municipality must have an up-to-date comprehensive plan. This regulates the use of land and water areas and how the built environment should be used, developed, and preserved. The comprehensive plan is significant for the municipalities, as well as other authorities', decisions in planning and construction matters, as well as permit assessments, and therefore plays a crucial role in preserving the values of the World Heritage Site.

One of the urban development goals in Tanum Municipality's current comprehensive plan is: "The World Heritage Site and the Kosterhavet National Park should be protected and developed in such a way that the values of the areas are preserved and strengthened." The World Heritage Site is mentioned repeatedly in the geographic recommendations as well as in the thematic recommendations within the areas of tourism and wind power.

UNESCO Guidelines and Goals for World Heritage Work

The cornerstone of the World Heritage Convention is the preservation and transmission of designated heritage, not only for the present but for future generations. When the Tanum rock carvings were designated as a World Heritage Site, Sweden took on this responsibility and committed itself as a state party to do "all it can to achieve this goal, to the utmost of its own resources," as stated in the convention's fourth article.

The Operational Guidelines for the Implementation of the World Heritage Convention provide instructions to the signatory states on how World Heritage work should be carried out in practice. In addition, there are several manuals, such as the Guidance and Toolkit for Impact Assessment in a World Heritage Context, used in assessing the consequences of actions that may affect the values of the World Heritage Site, and Managing Cultural World Heritage, which further describes the management of cultural World Heritage. The latter also includes instructions on what a management plan should contain.

Five strategic goals are outlined by UNESCO in the Budapest Declaration on World Heritage. All parties involved in World Heritage work are encouraged to cooperate and promote the so-called five Cs:

- **Credibility** – Strengthen the credibility of the World Heritage List as a representative and geographically balanced measure of cultural and natural properties of outstanding universal value.
- **Conservation** – Ensure effective conservation of World Heritage.
- **Capacity-building** – Promote capacity-building measures to enhance understanding and facilitate the implementation of the World Heritage Convention.
- **Communication** – Increase public awareness, engagement, and support for World Heritage through communication.

- **Community** – Strengthen the role of local communities in the implementation of the convention.

National World Heritage Strategy

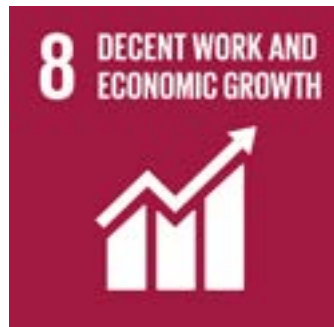
The National Heritage Board, together with the Swedish Environmental Protection Agency and the Swedish National Commission for UNESCO, in dialogue with relevant municipalities, authorities, and stakeholders, has developed a national strategy for World Heritage work. The implementation period is from 2020 to 2030.

The vision for World Heritage work is "World Heritage Sites pave the way to a sustainable and peaceful world," and the strategy has four overarching goals:

- The Agenda 2030 goals permeate all World Heritage work in Sweden.
- The work with World Heritage in Sweden sets an example in sustainably preserving, using, and developing natural and cultural environments.
- Sweden actively engages in international efforts, advocating for the effectiveness and credibility of the convention within UNESCO and highlighting the importance of World Heritage Sites for the Agenda 2030 goals.
- World Heritage work is characterized by collaboration, cooperation, dialogue, and local participation.

For the implementation of the strategy, action plans are developed with planned efforts for the national authorities within the nine designated areas of development. The roles of local and regional actors within these areas are also described. The areas of development include:

- Better harnessing the potential of World Heritage Sites to contribute to societal development and the Agenda 2030 goals.
- Increased knowledge about World Heritage, the World Heritage Convention, and what World Heritage work entails.



The management of the World Heritage Site can contribute to the realization of the global goals.

- More cohesive and clear communication and information about World Heritage Sites and World Heritage work, and better communication about the global connections of World Heritage work.
- Improved disaster preparedness and readiness for climate change impacts on World Heritage Sites.
- More developed work on World Heritage Site management plans.
- Clearer processes and the need for consultation, as well as good groundwork for planned changes in or around World Heritage Sites
- Clearer responsibilities and roles and more unified organization.
- Temporary investment in World Heritage coordinators.
- Continued active participation in international collaborations.

Agenda 2030

Agenda 2030 is an overarching strategic document adopted by the United Nations in 2015. The 17 Sustainable Development Goals are part of this framework. Examples of goals include eradicating poverty and hunger, achieving equality, combating climate change and its impacts,

and promoting peaceful and inclusive societies. Goal 11 (Sustainable Cities and Communities) is directly related to World Heritage Sites, and one of its sub-goals (11.4) aims to strengthen efforts to protect and safeguard the world's cultural and natural heritage. World Heritage management also relates to several other global goals.

The national strategy for World Heritage work aims to integrate Agenda 2030 into all World Heritage work, and one of the development areas in the action plan is to better harness the potential of World Heritage Sites to contribute to societal development and the Agenda 2030 goals.

World Heritage Work in Tanum – Management, Organization and Division of Responsibilities

The management of the World Heritage Site in Tanum involves a wide range of actors, including international, national, regional, and local entities. The work at all levels should be guided by both international commitments and adopted strategic goals.

National Responsibility

The government is ultimately responsible for ensuring that Sweden, as a signatory state, complies with the World Heritage Convention. The National Heritage Board, the Swedish Environmental Protection Agency, and the Swedish National Commission for UNESCO are the national authorities responsible for World Heritage work.



Participants in the 2023 volunteer camp are edging and cleaning a rock carving at Aspeberget.
Photo: Hans Lundenmark.

The National Heritage Board is responsible for cultural heritage World Heritage Sites, while the Swedish Environmental Protection Agency oversees natural heritage sites. The Swedish National Commission for UNESCO is tasked with advising the government on UNESCO's activities and promoting awareness of UNESCO in Sweden. In this context, it involves, for example, highlighting the global connections of World Heritage work. The roles of the National Heritage Board and the Swedish Environmental Protection Agency include monitoring developments in World Heritage areas and providing support to the county administrative boards as needed. These authorities are also responsible for nominating properties to UNESCO's World Heritage List.

Management at Regional and Local Levels

The County Administrative Board of Västra Götaland, as the regional state representative, is responsible for monitoring how the values of the World Heritage Site are safeguarded in spatial planning. It is also responsible for permitting activities related to ancient monuments under the Cultural Environment Act and for reviewing certain matters under the Environmental Code that concern areas with high cultural values. On

a more practical level, the County Administrative Board is responsible for land management and accessibility infrastructure, such as trails, stairs, and platforms at visitor destinations, as well as parking lots at Aspeberget, Litsleby, and Fossum. Additionally, the County Administrative Board establishes and monitors management plans for rock carvings and land areas and provides information signs in visitor areas.

The Region of Västra Götaland is responsible for growth issues and visitor destination development at a regional level. Through the Cultural Administration, the region operates the World Heritage Site Visitor Center at Vitlycke Museum, whose parking lot is also used by visitors to the area's most visited rock carving – Vitlyckehällen. In addition to tourist activities during the summer months, the museum conducts extensive educational initiatives aimed at preschools and schools as well as program activities for local residents during the off-season. Vitlycke Museum also houses an archive with documentation materials of rock carvings and one of Sweden's leading libraries focusing on rock carvings and the Bronze Age. The World Heritage Coordinator for Tanum is employed by and stationed at Vitlycke Museum; however, the coordinator position is jointly funded by the board's partners (see below).

Tanum Municipality plays a central role in World Heritage work as the decision-making authority responsible for local spatial planning and community development. Local participation is promoted through World Heritage educational initiatives in both schools and preschools, the development of the World Heritage Site as a visitor destination, and encouragement of activities related to cultural heritage.

Management Board

The management of the World Heritage Site of Tanum's rock carvings is carried out through the Management Board, composed of representatives from three parties:

- The County Administrative Board of Västra Götaland
- The Region of Västra Götaland
- Tanum Municipality

Additionally, there are individual parties such as landowners, associations, businesses, and other stakeholders who are also - in practice - involved in the management of the World Heritage Site.

The Management Board is not a legal entity but operates based on mutual agreements. Decisions are made within each organization, and as mentioned above, the three parties operate within the World Heritage Site by developing infrastructure, accessibility, and knowledge development with their own resources. The County Administrative Board and the municipality also have governmental assignments that are significant for the development of the World Heritage Site. The involvement of other parties in the World Heritage Site depends on the nature of their activities. However, the Management Board serves as the central hub that always promotes and advances the overall picture based on preservation, use, and development in harmony.

Each party has two representatives on the Management Board, with the County Administrative Board serving as the chair. The Board meets four times a year or more frequently if necessary. The Management Board has the overall responsibility for implementing the management plan to ensure the preservation

of the World Heritage Site's values and to carry out measures to develop the cultural heritage efficiently and sustainably. The Board is also responsible for overarching policy issues. Another task is to ensure that World Heritage work contributes to local and regional development. The representatives of the parties are responsible for fulfilling the Board's mission based on their respective areas of expertise.

World Heritage Coordination

The Region of Västra Götaland, through the Cultural Administration/Vitlycke Museum, is the coordinating authority with a permanent employee at Vitlycke Museum serving as the World Heritage Coordinator. The coordinating authority appoints the World Heritage Coordinator after proposals for candidates have been presented and approved by the Management Board.

The organization of World Heritage coordination is regulated through an agreement between the parties in the Management Board. The purpose of the agreement is to strengthen the conditions for increased local engagement in the preservation, use, and development of the World Heritage Site, further develop the management's ability to influence the preservation, use, and development of the World Heritage Site, and improve the opportunities to monitor the condition of the World Heritage Site.

Management Organization

The management organization ensures both the management plan and its implementation, and that planning and efforts are carried out with significant involvement from the surrounding community. The World Heritage Site's management group consists of the management of the County Administrative Board of Västra Götaland, the Region of Västra Götaland, and Tanum Municipality. The parties of the management group appoint the Management Board of the World Heritage Site. The management group assigns the Management Board to implement the management plan and is ultimately responsible for the collaboration of the parties in the work with the World Heritage Site.

Vision and Goals

The World Heritage Site in Tanum enriches and engages people.

Vision

The vision serves as our shared point of inspiration for preserving and developing the World Heritage Site sustainably. Development should be sustainable from environmental, social, cultural, and economic perspectives. This is achieved, among other things, by establishing a system for dialogue, coordination, and preparation of strategic decisions concerning the preservation, use, and development of the World Heritage Site through the management organization. Another important success factor is the strong local anchoring of the World Heritage Site.

To realize the vision and prioritize our efforts, we need goals for our operations. The goals aim to guide the collaborating parties so that activity, organization, and management occur with a holistic view based on the World Heritage Site.

Overall Objectives

The objectives of the World Heritage Site work are based on the overarching goals of the Management Board's parties. These include Agenda 2030, national, regional, and municipal political objectives, as well as UNESCO's World Heritage Convention. These overarching frameworks thus form the basis for both goals and legal protection in the World Heritage Site.

The management plan takes a comprehensive approach to how these overarching goals should be integrated into the World Heritage Site work. The overall objectives of the management plan link the parties' common ambition with the management and development of the

World Heritage Site and provide conditions for sustainable development.

Each party also works based on its own objectives and can develop its own operational and activity plans with operational objectives. Coordination around these agendas is done through the work of the Management Board and is fed back into the goals of the management plan. If the overarching external objectives change, the management plan can be rewritten to adapt to these changes.

The goals of the Rock Carvings in Tanum World Heritage Site are:

1. The World Heritage Site has strong radiance as a source of knowledge, experience, and identity.
2. The values of the rock carvings and the landscape are preserved, used, and strengthened sustainably.
3. Through collaboration and participation, the World Heritage Site contributes to economic, social, and cultural development.

To achieve the goals and live up to the vision of the World Heritage Site, annual work plans are established by the Management Board. The condition of how the World Heritage Site's most important values and attributes develop should be regularly monitored. To support this, there is a specific monitoring program, along with other indicators specified under each theme. More on this is found in the chapter on Implementation and Monitoring.

The protection of the world's cultural and natural heritage is an important contribution to sustainable development according to Agenda 2030, and one of the sub-goals is to strengthen efforts to protect and safeguard World Heritage

Sites. To clarify the connection between the goals of the Rock Carvings in Tanum World Heritage Site and Agenda 2030, the global goals that the management of the World Heritage Site can contribute to are presented below.

Goal 1 – Knowledge, Experience, and Identity

The World Heritage Site has strong radiance as a source of knowledge, experience, and identity.

Sound knowledge of rock art and the ability to apply it in practical work are fundamental principles for preserving and developing the World Heritage Site. Without solid knowledge of the specific values of the World Heritage Site and how they should be managed and used in a balanced way, long-term development is not sustainable.

The Tanum rock carvings are among our earliest recognized cultural environments and have been the subject of many generations of researchers' surveys and interpretive struggles for over 200 years. Promoting continued vigorous knowledge building is a central part of managing the World Heritage Site.

The Rock carvings in Tanum World Heritage Site should be world-leading in knowledge and method development in the areas of documentation, conservation, and care of rock art. The use of modern digital technology and information technology for damage inventory, analysis, and information dissemination can contribute to giving the World Heritage Site this advanced position. At the same time, the craftsmanship of being able to discern the sometimes almost invisible rock carvings must be passed on to a new generation of archaeologists. More complementary scientific methods to assess what the images look like are better than fewer.

Regardless of the documentation method, it is crucial that the results are made available to the research community and the public. The World



Students at the World Heritage Preschool at Vitlycke Museum learn about deer and hunting with the rock carvings as a starting point. Photo: Emma Backelin.



The rock carvings at Aspeberget are one of the visitor destinations in the World Heritage area. The site has parking for people with disabilities and a wheelchair ramp leading all the way to the carvings. Photo: Hans Lundenmark.

Heritage Site rests on the accessibility and comprehensibility of the images. The rock carvings illustrate thoughts that are almost 4,000 years old - being able to perceive what the images look like is the first step towards understanding them, both for visitors and researchers.

Accessibility at the visitor sites in the World Heritage area is a prerequisite for the experience. It involves appropriate parking facilities, good physical accessibility to the rock carvings, easy-to-understand signage, and other educational materials, always available in multiple languages. A central part of this work is also the maintenance of the areas - visitor facilities in impeccable condition reflect the status of the area as one of the world's most important cultural-historical sites.

The visitor destinations in the Rock carvings in Tanum World Heritage Site are Vitlycke, Aspeberget, Litsleby, and Fossum. A hiking trail starting at Kyrkoryk is operated by the association "Hiking in the World Heritage." At the rest area "World Heritage Tanum" at the E6, there is an exhibition about local and global heritage sites as well as a shorter cultural-historical walk.

Collaboration with schools is central at all levels under this theme. The World Heritage Site is a unique resource for enhancing students' knowledge of and interest in the environment they know and live in. Knowledge of the rock carvings equals preservation in the long

run, and integrating the World Heritage Site's rich knowledge content into schoolwork is part of developing the World Heritage Site both as a learning environment and to stimulate long-term engagement in World Heritage Site work.

A comprehensible and well-rooted World Heritage Site that provides tangible positive effects in the local community strengthens local and regional identity by functioning as a symbol of community and history. It can give residents a sense of pride and connection to their area and cultural heritage.

Summary of conditions for the Rock carvings in Tanum World Heritage Site to be a source of knowledge, experience, and identity:

- Vigorous research.
- Accessibility of rock art documentation.
- Accessible and comprehensible rock carvings.
- Guaranteed resources for the maintenance of visitor sites.
- Well-developed collaboration with schools.

Link to the Sustainable Development Goals

The ambition for the Tanum World Heritage Site to be a source of knowledge, experience, and identity primarily links to the global goals related to health and education.

3.4 Reduce mortality from non-communicable diseases and promote mental health .

Access to culture is central to quality of life and public health and can also enhance physical, mental, and social well-being.



4.1 Free and equitable primary and secondary education of good quality.

Collaboration with schools is central to the World Heritage Site's goals for knowledge building.



4.2 Equal access to quality pre-school education.

Collaboration with preschools is central to the World Heritage Site's goals for knowledge building.



Goal 2 – Conservation and Management

The values of the rock carvings and the landscape are preserved, utilized, and strengthened in a sustainable manner.

Objects inscribed on the World Heritage List represent the most important contributions to the global natural and cultural heritage. They are all of such significance that their preservation and protection are a concern for all of humanity. This means that the Tanum rock carvings must be safeguarded and cared for in a way that does not compromise the foundations of the World Heritage designation. At the same time, the World Heritage Site is a major asset for the attractiveness and development of Västra Götaland, which needs to be considered in all renewal and planning efforts.

To safeguard the unique cultural environment and simultaneously develop it for the future, it is necessary that the values Tanum World Heritage possesses are not jeopardized but rather preserved and utilized in a sustainable manner. A prerequisite for this is a clear management organization with a developed approach and resources that enable systematic efforts for both securing and caring for the site and its follow-up. State authorities, the municipality, and organizations at local, regional, and national levels need to have a good understanding and commitment to be able to make decisions where the World Heritage Site and its values are considered. The lack of national legislation on the protection of World Heritage sites requires detailed knowledge of a complex web of laws, regulations, and recommendations and how they impact the Outstanding Universal Value (OUV) of the World Heritage Site.

Central to this theme is the conservation of the rock carvings and ensuring their existence for future generations, as well as their function in the present as visitor destinations and sources of knowledge, while being physically and intellectually accessible to the site's residents and visitors. In this context, it is important not to fall into the trap of believing that accessibility compromises conservation. These two goals are not in conflict but are instead prerequisites for each other.

Additionally, it is essential to have a vibrant agriculture and forestry sector capable of keeping the landscape open so that its history can be explained and experienced, while all activities should be conducted with respect for the values of the World Heritage Site.

Prerequisites for the preservation, use, and strengthening of the values of the rock carvings and the landscape in a sustainable manner:

- Knowledge of the values of the World Heritage Site.
- Knowledge of threats to the values of the World Heritage Site.
- Strong and adequately funded management organization.
- Evidence-based conservation work.

- Clear recommendations and rules for the use and development of the area.
- The World Heritage Site is accessible and understandable to the public.
- Understanding and engagement with the World Heritage Site by the local community.
- Vibrant agriculture and forestry.

Link to the Sustainable Development Goals

Goal 11 (Sustainable Cities and Communities) is directly related to World Heritage Sites - one of the sub-goals (11.4) aims to strengthen efforts to protect and safeguard the world's cultural and natural heritage. Additionally, sustainable tourism is a central part of World Heritage Site management.

8.9 Promote favourable and sustainable tourism.

Good conditions for sustainable visits to the World Heritage Site are crucial for both conservation and sustainable use of the site.



11.4 Protect the world's natural and cultural heritage

A central goal for the management plan in general and this theme in particular.



Goal 3 – Economic, Social, and Cultural Development

Through collaboration and participation, the World Heritage site contributes to economic, social, and cultural development.

Through collaboration and participation, the Rock carvings in Tanum World Heritage site constitutes a significant force in promoting economic, social, and cultural development at the

local, regional, and national levels. A prerequisite for sustainable management is that there is consensus between the managing authorities and the local community.

The World Heritage site's contribution to economic development primarily comes from the area's great potential for the tourism industry. The rock carvings are an integral part of the municipality's identity and brand, and the efforts we make to develop the World Heritage site also contribute to visitors' impression and perception of Västra Götaland as a tourist region. No one creates a tourist destination with international appeal alone, and a crucial part for the future is that the development work can be based on shared interests and shared responsibility.

The economic benefit is determined by the number of visitors and how much they spend on food, accommodation, and other items while here. In addition to these direct revenues, there are economic multipliers, such as how much those working in tourism spend in the area. The size of this benefit is unknown today; the lack of recurring analyses is therefore a weakness in today's management.

A clear, demonstrated economic potential contributes to the local community's acceptance of the World Heritage site. At the same time, uncontrolled tourism can negatively impact the values of the World Heritage site, something there are many examples of. Additionally, more visitors can lead to greater wear and tear at the visitor sites, which requires a robust and well-funded management organization.

Social development is about working for a society that is equitable and fair, without unjust differences. The equal value of all people is a central concept, and people having trust and confidence in each other. In a socially sustainable society, there is an opportunity to influence societal development, and an important success factor is utilizing that opportunity.

It is therefore important to prioritize the involvement of residents in World Heritage site work. The opportunity to influence management work leads to engagement and increased pride in the World Heritage site. Residents and stake-



Vitlycke Museum is organizing evening tours for locals and tourists at the Fossum rock carvings.
Photo: Ian Schemper.

holders outside the management council should be involved in development issues within the World Heritage area relevant to them, so that all involved have the opportunity to participate in an ongoing processes. This, in turn, provides better conditions for preserving the value-bearing attributes of the World Heritage site through increased acceptance, and understanding, of its values.

The unique cultural historical values in Tanum, and the large number of visitors attracted by these values, provide a favourable environment for other cultural expressions and other cultural activities. This applies especially to businesses in cultural and creative industries - activities that have cultural creation and creativity as raw materials. An increasing trend is that this type of activity is found in rural areas, where they can have significant importance in broadening the economy and providing children and adults with opportunities to express their creativity and innovation, thus contributing to positive societal development on all levels. Therefore, the management of the World Heritage site should actively work to create better conditions for cultural and creative development.

Summary of conditions for the Tanum World Heritage site to contribute to economic, social, and cultural development through collaboration and participation:

- Understanding of the global value of the World Heritage site and the obligations and opportunities that come with this value.

- Opportunity for participation and influence - management authorities are responsive to the needs of the local community.
- Favourable conditions for visitors and the tourism industry as well as cultural and creative industries.

Linkage to the Sustainable Development Goals

World Heritage work provides conditions for social, economic and political inclusion through the promotion of cultural and creative industries, sustainable tourism, and inclusive management.

8.9 Promote favorable and sustainable tourism.

A prerequisite for local economic development and anchoring.



10.2 A prerequisite for local economic development and anchoring.

The overarching goal for this theme.



16.7 Ensure responsive, inclusive, and representative decision-making

The opportunity to influence management work leads to engagement and increased pride.



Implementation and Follow-up

To achieve the goals and live up to the vision of the World Heritage site, annual work plans are established by the management council. Follow-up is carried out at two levels: UNESCO's periodic reporting and through a monitoring program for the Rock carvings in Tanum World Heritage site. The program specifies measurable and observable signs (indicators) used to evaluate and monitor changes, trends, or aspects of values or phenomena related to the established goals of World Heritage work. Completed efforts are reported annually to the World Heritage site's management group.

Annual Work Plans

Current priorities for World Heritage work and the planned activities of the partners in the management council are described in annual work plans. The plan is prepared by the management council for approval by the management group. Work on developing next year's work plan should begin in time so that, if necessary, it can be included in the respective budget processes of the parties involved.

Periodic Reporting

Periodic reporting is one of the central monitoring mechanisms for conservation under the World Heritage Convention. Approximately every eighth year, state parties are invited to submit a report to the World Heritage Committee on the condition of World Heritage sites within their territory.

- Factors that may affect the World Heritage site, positively or negatively – in the case of Tanum, it may involve the presence of a well-functioning visitor center, changes in land use, a warmer and moister climate, etc.

- Description of protection and management – existing legislation; whether the boundaries of the World Heritage site are sufficient to preserve its values; whether there is a management plan and if it is used in management activities, and more.
- Review of the financing of World Heritage work and whether there is sufficient expertise to ensure the preservation of the World Heritage site.
- Description of the status of areas such as research, education, communication, and the World Heritage site as a visitor destination.

The latest periodic reporting, the third in order, was carried out in 2023–2024, and the next one is estimated to take place in the early 2030s. Reporting is done in the form of a questionnaire from UNESCO, with the Swedish National Heritage Board responsible for national coordination.

Reporting is conducted by the World Heritage coordinator together with a working group appointed by the management council. In addition, other expertise may be brought in if deemed necessary.

Monitoring Plan

World Heritage is defined in the World Heritage Convention as cultural and natural heritage that "is of outstanding universal value from the point of view of history, art or science." Countries that have ratified the World Heritage Convention shall ensure the identification, protection, conservation, presentation, and transmission to future generations of the cultural and natural heritage designated as World Heritage. This entails



The County Administrative Board is scanning rock carvings at Tegneby. Photo: Martin Johansson.

that states should have policies, organizations, legislation, research, and cultural heritage practices that collectively provide conditions for the care and preservation of World Heritage. This commitment includes monitoring and addressing any deficiencies and threats to the values of World Heritage.

Managers of areas included on the World Heritage List should ensure that the invaluable values for humanity are preserved over time and communicated to both visitors and residents in the area. To achieve this, an evaluation system with indicators – both qualitative and quantitative – should be in place. Through recurrent evaluation of the results of management efforts, a solid foundation is provided for future-oriented and proactive management of the area.

The overarching purpose of the monitoring effort is to acquire knowledge about the designated attributes of the World Heritage site: the rock carvings and other archaeological remains, as well as the open cultural landscape and the placement of buildings within the landscape.

The monitoring program should also follow up on the objectives of the management work in the World Heritage site. Indicators for the three overarching objectives have been identified and described in the program. Some of these indicators are drawn from the third cycle of periodic reporting to facilitate future feedback to UNESCO.



Appendix 1.

Selection Criteria for World Heritage.

To be included on the World Heritage List, sites must have outstanding universal significance and meet at least one of ten selection criteria. The first six criteria apply to cultural heritage, and the remaining four apply to natural heritage.

- i. to represent a masterpiece of human creative genius;
- ii. to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- iii. to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage (s) in human history;
- v. to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- vi. to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- vii. to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- viii. to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- ix. to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- x. to 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.

Bilaga 2.

Retrospective Statement of Outstanding Universal Value (rSOUV)

Rock Carvings in Tanum (Sweden)

(557 rev, 1994)

Brief Synthesis

The Rock Carvings in Tanum, located in the northern part of Bohuslän province in western Sweden (Västra Götaland County), are a unique artistic achievement for their rich and varied motifs (depictions of humans and animals, weapons, boats, and other symbols) and for the cultural and chronological unity they express. They reveal the life and beliefs of people living in the Nordic region of Bronze Age Europe, and are remarkable for their large numbers and outstanding quality. A cultural landscape with a continuity in settlement and consistency in land use that spans more than eight millennia, the area is rendered outstanding by its assemblage of Bronze Age rock art.

Northern Bohuslän is a land of granite bedrock, parts of which were scraped clean about 14,000 years ago as the Scandinavian Ice Sheet slowly moved northward, leaving gently curved rock faces exposed. These were the “canvases” selected by Bronze Age artists. There are at least 1,500 known rock carving sites in northern Bohuslän concentrated in certain areas, including the parish of Tanum. The carvings were executed by pecking and grinding the rock using stone hammers and points. The panels of rock art, skilfully created with simple tools, show a rich diversity of compositions of the highest quality, even when regarded simply as works of art or design. Compared to other similar contexts, these motifs and scenes are even more outstanding in their ability to convey reflections of life and cosmology during the Nordic Bronze Age (c. 1700 BC - 500 BC). It is obvious that the intention of these panels, which are often situated

in commanding positions in the landscape, is to convey messages, thereby confirming their role as primary contemporary centres for worship and cult.

The Rock Carvings in Tanum represent a unique artistic achievement through their skilful and detailed depictions of animals, humans, ships, weapons, and symbols of the Bronze Age. These sometimes include lively scenes and complex compositions of elaborate motifs from travel, status, power, warfare, and cult. Some panels, or rather parts of them, were obviously planned in advance. Probably the most evident example of this is the panel at Fossum. In many cases, these motifs, techniques, and compositions create an exceptional testimony to the culture of the European Bronze Age.

Criterion (i): The rock carvings of the Tanum region constitute an outstanding example of Bronze Age art of the highest quality.

Criterion (iii): The range of motifs on the Tanum rock carvings provides exceptional evidence of many aspects of life in the European Bronze Age.

Criterion (iv): The continuity of settlement and the ongoing practice of agriculture, as illustrated by the Tanum region’s rock carvings, archaeological vestiges, and modern landscape features, combine to demonstrate a remarkable permanence during eight thousand years of human history.

Integrity

Within the boundaries of the 4,137.609 ha property are located all the elements necessary to express the Outstanding Universal Value of Rock Carvings in Tanum, including over 600 known rock carving sites, which is the highest density of such panels in northern Europe. The integrity and completeness of this area is illustrated in the centrally situated Tanum plain, where rock carving sites occur in zones in the plain’s western and north-eastern peripheries.

The great majority of known settlements and prehistoric cemeteries are located at the northern and eastern edges of this plain. The boundaries thus adequately ensure the complete representation of the features and processes that convey the property's significance. No buffer zone has been defined.

The property in general does not suffer from adverse effects of development and/or neglect. A significant proportion of the carvings are well preserved, although a few vulnerable sites are in the process of ongoing degradation. An upgrading of the E6 highway, which crosses parts of this property, was planned at the time of its inscription. Swedish authorities worked jointly with the World Heritage Centre and ICOMOS and reached a satisfactory solution in 2009 to protect the attributes that sustain the Outstanding Universal Value of the property. Eleven wind turbines located about 5 km northeast of the World Heritage property were approved according to Swedish legislation and completed in 2014. Studies indicate that the impact on the Outstanding Universal Value of the property is negligible. One wind farm approximately 10 km north of the World Heritage property is planned.

Authenticity

Rock Carvings in Tanum is entirely authentic in location and setting, forms and designs, materials and substances, and spirit and feeling, as substantiated by scientific studies of the carvings themselves and by comparative typological studies of dated Bronze Age art on other archaeological artefacts. The authenticity is expressed not only in the panels themselves, but also in the adjacent terrain, which may contain evidence of rituals and other practices connected to them. This authenticity has been maintained. The consistency in land use with its ongoing practice of agriculture makes it possible to understand the location of the panels close to the Bronze Age sea level. This also reinforces the authenticity of the property. In Tanum, as in the rest of Scandinavia, figures at selected rock carving sites have been repeatedly painted over the past five or six decades, since their granitic environment can make them difficult to distinguish.

Today, only a few carefully selected exposed panels are painted with a non-destructive paint by trained specialists. Future structural changes in farming and agriculture may threaten the qualities of the open cultivated landscape.

Protection and management requirements

Rock Carvings in Tanum is designated as an Area of National Interest, and as such is protected under the Environmental Code (2010) and the Planning and Building Act (1987). A major part of this property includes about 1,000 individual monuments or groups of monuments that are protected under the Cultural Heritage Act (1998). All the rock carvings in the property are located on privately owned land except for part of those on Vitlycke Farm, which are owned by the Museum of Rock Carvings at Vitlycke. In 2012 the Management Council adopted a management plan that includes a vision and objectives for protecting and managing the property. The plan has a yearly revised plan of action focusing on organization, increased engagement of the local population, monitoring, sustainable tourism, and a full documentation of all panels (due to be finished in 2020). Three international research and development projects as well as comprehensive programs for recording damage have created vital basic knowledge for the implementation of future protection programs.

Sustaining the Outstanding Universal Value of the property over time will require ensuring the municipal master plan continues to address wind energy issues, including impeding wind turbines within the World Heritage property; continues to identify areas outside the property with respect to the cultural and natural values of the landscape as a whole; and continues to examine the question of how increased sustainable tourism may contribute to the economic development of the region. Important steps in the latter include the creation of a rest stop in conjunction with the new E6 highway, as a gateway to the World Heritage property and with information about the area, and an increase in the visitor capacity of Vitlycke Museum. The museum, including the re-creation of a Bronze

Age farm, plays an important role in helping visitors to decipher the rock carvings and the landscape. Its capacity as a visitor and management centre will be strengthened in coming years.

The vulnerable sites in the process of on-going degradation should continue to be closely monitored, and any degradation counteracted according to accepted international practices.





Photo: Hans Lunddenmark