

**Identification**

<i>Nomination</i>	The Rock Carvings in Tanum
<i>Location</i>	Bohuslän
<i>State Party</i>	Sweden
<i>Date</i>	1 October 1993

**Justification by State Party**

The Bronze Age rock carvings in Tanum represent a unique artistic achievement through their rich and varied motifs and skilful and detailed depictions of animals, humans, ships, weapons, and symbols of Bronze Age man. The often lively scenes and complex compositions of elaborate motifs illustrate everyday life, warfare, cult, and religion. Some of the panels (eg Fossum, Vitlycke, and Aspeberget) were obviously planned in advance. In many cases the motifs, techniques, and compositions are exceptional testimony of the European Bronze Age culture.

This rock art is unique by comparison with rock-art areas in other parts of Scandinavia, Europe, and the world in its outstanding artistic qualities and its varied and vivid scenic compositions. It fulfils criteria i and iii for inclusion on the World Heritage List.

**History and Description***History*

The landscape in which the rock carvings are situated has undergone a number of dramatic changes since the end of the Ice Age. The land began to rise some 10,000 years ago, but at the same time the melting of the ice cap caused the sea level to rise, so there have been successive periods of inundation and uplifting, combined with marked climatic fluctuations. Human occupation began in the Mesolithic period (9000-4000 BC).

From around 3800 BC the economy changed, with the introduction of agriculture and the establishment of permanent settlements. A number of Neolithic burial mounds with passage graves survive in the Bohuslän region. The funerary practice changed to burial in cist graves c. 2400 BC.

Around 1800 BC, when the sea level was at least 15 m above its present level, the region entered the Bronze Age. Many burial mounds, much higher than those in the preceding period, are to be found in Bohuslän. Bronze artefacts such as swords, spears, and axes were imported, and these figure on the rock engravings dated to this period.

Cremation replaced inhumation around 1000 BC; some of the cinerary urns were placed in stone settings in the form of boats, which also figure prominently among the rock carvings. Analysis of the representations on the engraved stones and comparison with other cultural material of the period, such as weapons, tools, boats, etc, shows that this was the heyday of rock art; very little can be securely dated either earlier or later than the Bronze Age (1800-500 BC).

In succeeding centuries the sea level continued to drop, so that by 500 BC it was only 4 m above its present level. This led to the emergence of large areas of land, but this coincided with deteriorating climatic conditions, and a period of hardship ensued. It was not until the beginning of the 1st millennium AD that

Scandinavia resumed contact with the rest of Europe, to enter into its Golden Age from ADS 400 to the end of the Viking period. It was this period which saw the Bohuslän landscape assume its present form and features.

### *Description*

Northern Bohuslän is a land of granite bedrock, parts of which were scraped clean as the ice cap slowly moved northwards, leaving gently curved rock faces exposed, many of them bearing deep scratches made by rocks caught in the receding ice. These were the "canvases" selected by the Bronze Age artists, all of them just above the shoreline of the period that began in 1500 BC, ie 25-29 m above present sea level.

The carvings were executed by scratching an outline, pecking and grinding the rock to break the surface and remove rock dust, and then grinding to the depth required, using stone hammers and points. Surviving engravings may be as little as 1 mm deep or as much as 30 or even 40 mm. It is suggested that the more deeply engraved figures were of greater symbolic significance and therefore required to be visible to larger gatherings of people.

There are at least 1500 known rock carving sites in Northern Bohuslän, each with a number of images, but new examples are regularly coming to light as research continues. They are concentrated in certain areas: for example, the parish of Tanum has over 360 recorded sites, Kville 280, and Tossene 180, but there are many fewer in other parishes. The total number of images is well over 40,000, many more than in any other part of Scandinavia. Some sites such as Stenbacken, Finntorp, Ryk, Vitlycke, and Lökeberg, have as many as 400-500 images.

There is a rich variety in the images. Thirteen categories have been identified: cup marks; discs, circles, and wheels; boats, ships, and sledges; animals; humans; hands; foot-soles and feet; wheeled vehicles; ards (primitive ploughs); nets, traps, and mazes; trees; weapons and other equipment; and other images. These occur in many different combinations at different sites.

There have been many interpretations of the significance of these carvings since research began on them in the late 18th century. The generally accepted explanation at the present time is that they are examples of primitive symbolic art, with its two facets. On the one hand they are expressions of instrumental art, demonstrating the order of life and the pattern of existence (weapons, waggons, animals, humans) and on the other of transcendental art, concerned with the other world and the unknown (distorted animals and humans, disembodied hands).

### **Management and Protection**

#### *Legal status*

In Sweden all archaeological monuments (including rock carvings) are protected under the Act concerning Ancient Monuments and Finds (Swedish Statute Book SFS 1988:950, chap. 2, section 1), which is one of the most comprehensive and effective statutes of its kind in the world. This law provides for protection to be effective over a large enough area of ground to ensure the preservation of the remains and to enable their nature and significance to be made apparent. All archaeological sites are accessible to the general public through the Rights of Commons (*Allemansrätten*). In addition to being protected under this legislation, the rock carvings in Tanum have been declared National Heritage Monuments.

The provisions of the 1988 Law mean that each rock carving site has its own buffer zone. The landscape of the whole region is also protected by national and local environmental protection regulations as a National Heritage Area, within which authorization is required for any actions that may have an adverse impact on its landscape quality.

All the rock carvings included in the nomination are on privately owned land, with the exception of part of those on Vitlycke Farm, which are owned by the Museum of Rock Carvings at Vitlycke.

## *Management*

The Central Board of National Antiquities (*Riksantikvarie-ämbetet*), which is responsible for the implementation of the 1988 Act, is working with Bohusläns Museum and the environmental unit at the County Administrative Board in Göteborg in the preparation of a list of the most important panels, which are being examined thoroughly for environmental, geological, and archaeological micro-data. These data will be put into a computerized Rock Art Register of the Central Board, which will be the basis for future actions and research.

A development plan has been prepared by the Västhall Project, a joint project of the Central Board, the County Museum of Bohuslän, and the Commune of Tanum, intended to further development of the area of rock carvings for the commune, the general public, and tourists, and to improve the conditions for research, protection, and conservation of the rock art. It includes measures for improved public access to several sites (eg Fossum, Varlös, Kalleby) and rehabilitation of existing public access arrangements at others (Vitlycke, Tegneby, Litsleby, etc). This plan includes the construction of a new museum and visitor centre at Vitlycke, designed by the internationally renowned architect Carl Nyrén, and further developments at the Bronze Age farm site at Vitlycke. It is intended that the new "House of Rock Carvings" will be an international research centre.

Conservation action at the rock carvings themselves will include changing the surrounding vegetation from acid to basic and the installation of facilities such as footbridges, roofs, etc. to permit an increase in visitor numbers without putting the rock carvings at risk. At the present time the Museum receives around 35,000 visitors each year; the number of visitors to the rock carvings themselves is estimated to be around 130,000.

## **Conservation and Authenticity**

### *Conservation history*

In 1989 the Central Board of National Antiquities initiated a research project on the state of preservation of rock carvings in Sweden, with particular reference to those at Tanum in Bohuslän, following recognition of the damage by erosion since the early 1970s on some of the panels, especially the famous one at Aspeberget. The main problem was identified as acid rain, to which granite (the material on which most of the carvings are to be found) is particularly susceptible. The Aspeberget panel was among those especially at risk, although others, such as the panels at Fossum, Varlös, Vitlycke, Litsleby, and Kalleby, are unaffected.

A variety of techniques for maintenance and conservation have been used. The technique most commonly applied consists of cleaning of the carvings and filling them with a non-destructive paint by trained specialists. The research project on the erosion of granite and conservation methods to counteract it is in progress at the Central Board.

### *Authenticity*

The corpus of rock carvings in Bohuslän that is the subject of this nomination is entirely authentic. This is substantiated by scientific studies of the carvings themselves and by comparative typological studies of dated Bronze Age art on other archaeological artefacts.

## **Evaluation**

### *Action by ICOMOS*

An ICOMOS expert mission visited the Tanum rock carvings in October 1993 and had discussions with representatives of national and regional conservation agencies and the authorities of Tanum Commune.

The nomination dossier was submitted to the ICOMOS International Committee on Rock Art and to Professor John M. Coles (Exeter University), a world authority on the European Bronze Age, who has carried out a special study of the rock art of Scandinavia.

### *Qualities*

The following comments were received from the Chairman of the ICOMOS International Committee on Rock Art (Professor Jean Clottes):

These engraved stones ... constitute a group of the highest world importance, both for their variety (representations of humans, animals, and objects such as weapons and boats) and for their cultural and chronological integrity. They represent, both in their number and in their high quality, the ideas and beliefs of a period in prehistory, the Bronze Age, in this region of Scandinavia. It was not by chance that the earliest studies of rock art began in this part of the world as early as the 18th century.

Those responsible for the management of these sites are extremely committed to their conservation. This is well covered by the ancient monuments legislation and their designation as National Heritage Monuments. The management itself is carried out excellently: wooden walkways allow the carvings to be looked at without touching them, there are interpretive panels, and the use of non-destructive biodegradable paint makes them easier for the general public to see and photograph, thereby avoiding the use of chalk or rubbing (techniques in use at other World Heritage Sites such as Valcamonica and Alta).

In conclusion, the Tanum sites fully justify inclusion on the World Heritage List ... on the basis of the criteria mentioned.

This opinion was supported by Professor Coles: "The rock carvings of Northern Bohuslän are one of the treasures of the ancient world of the north. No other area in all of Europe can surpass Bohuslän in the number and variety of images carved in the living rock."

### *Comparative analysis*

There are many rock-art sites in Scandinavia. However, the group in northern Bohuslän is outstanding because of the wealth and variety of images. Of particular importance are the representations of artefacts such as shields, swords, helmets, and neck-rings, which do not occur in such profusion and diversity on other protohistoric rock art sites. The representations of boats are of special interest, since they can be linked directly with the pre-Roman Iron Age boat excavated at Hjortspring (Denmark).

The ensemble of rock art at Alta in Finmark (Norway) is already inscribed on the World Heritage List (No. 352). This group is very different in character to the Bohuslän rock carvings. It represents the circumpolar hunting tradition of the Mesolithic period in contrast to the Neolithic and later societies of the south, which were based on settled agriculture. The techniques employed were similar, but the iconography is very different: for example, in the Alta group representations of wild animals predominate and there is a higher proportion of single figures than group compositions, as in Bohuslän.

The two rock-art ensembles of Alta and Bohuslän may with justification therefore be characterized as complementary, both in time and as reflections of two distinct cultural traditions, hunter-gatherers and farmers respectively. Taken together they illustrate the pinnacle of this form of prehistoric art.

### *ICOMOS recommendation for future action*

The commitment of national and local authorities to the continued preservation and protection of these rock carvings is impressive. ICOMOS hopes that they will continue with their work of improving the facilities for visitors at the sites, particularly the smaller and less accessible ones, where it is essential that there should be proper safeguards against direct impact by visitors.

### *Additional comments*

The Bronze Age rock carvings of Tanum are located in a rich prehistoric environment, which contains substantial evidence of settlements and cemeteries. These include over forty Bronze Age cairns, ten cemeteries, and fifty barrows, either singly or in groups. The area has in fact been continuously occupied by man for the past eight thousand years.

There are numerous examples of close spatial contact between these funerary monuments and historic farms and villages. The links are especially close in the case of Iron Age cemeteries. Many of the place-names end in *-hem*, *-vin*, and *-by*, indicative of the farms having been founded in the Early or Middle Iron Age or the Viking period. A similar spatial distribution in relation to settlements can be identified for the rock carvings. The area itself has been a very important one for cattle raising and agriculture since the Bronze Age, as attested by archaeological excavations and by the motifs on some of the stones. This tradition has continued up to the present day, and the landscape has high environmental value.

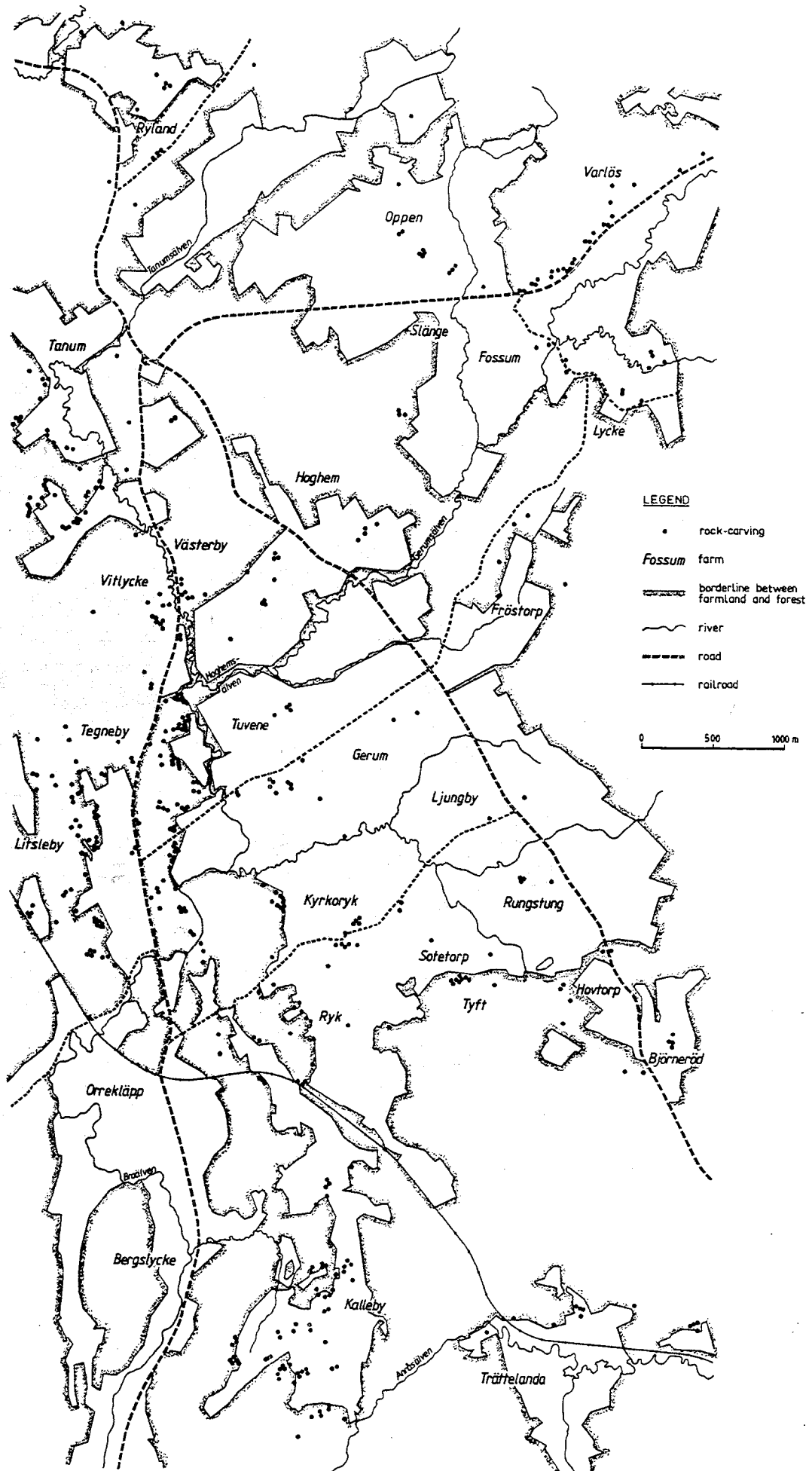
The rock carvings that are the subject of this nomination therefore form one element in a landscape that shows remarkable continuity in use and appearance over eight millennia. ICOMOS therefore proposes that the whole area should be treated as a cultural landscape, rendered outstanding by the fact that it contains this unique assemblage of Bronze Age rock art.

### **Recommendation**

That this property be included on the World Heritage List on the basis of criteria i, iii, and iv:

- **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 provide exceptional evidence of many aspects of life in the European Bronze Age.
- **Criterion iv** The continuity of settlement and consistency in land use in the Tanum are, as illustrated by the rock art, the archaeological remains, and the features of the modern landscape in the Tanum region combine to make this a remarkable example of continuity over eight millennia of human history.

ICOMOS, October 1994



Tanum : zone d'art rupestre /  
rock art area