

## Southern Öland (Sweden)

No 968

### Identification

<i>Nomination</i>	Södra Ölands Odlingsskapskap (the Agricultural Landscape of Southern Öland)
<i>Location</i>	County of Kalmar
<i>State Party</i>	Sweden
<i>Date</i>	23 June 1999

### Justification by State Party

The interaction between man and the natural environment in the south of Öland is of unique universal value. The continuity of land use goes back to the Stone Age, when man as a farmer began using this area. The use made of the land has not changed significantly since then, with arable farming and animal husbandry remaining the principal economic activity.

The frames within which the people of Öland have used their landscape have been dictated by conditions of natural geography. The land division is easily discernible, and one clearly perceives the division between infields and outfields, a division which has been constant since the medieval period, by which time all available farmland was being utilized. The outfields are still being used as pasturage. Together the linear villages, the infields, the coastland, and the limestone pan make up a unique agricultural landscape possessed of great cultural and natural values of more than a thousand years' continuity.

The agricultural landscape of Öland is an organically evolved landscape which permits and depends upon continuing traditional land use. This living agricultural community also includes a residual Iron Age landscape, as well as abundant traces of the Stone Age and Bronze Age. In Öland, therefore, man's agrarian history is made intelligible within a well defined geocultural region.

*Stora alvaret*, the main expanse of limestone pavement, with its remarkable use of common outfields, is an eminent example of a steppe-like ecosystem with significant ongoing ecological processes. This is borne out by numerous adaptations to climate, frost movements, and grazing, among other things. For all its meagre resources, the alvar has been developed into an agricultural landscape. Very unusual factors of geology, climate, and cultural history have here created a mosaic-like environment which includes many of the most important habitats for the preservation of biological diversity *in situ*. Endemic plant and animal species, relics,

species on the edge of their distribution, and species in outpost locales all co-exist here. One essential reason for the survival of these species has been the continuing openness of the alvar, maintained by human agency for thousands of years. In spite of this environment having been used by man for several millennia, elements of alien species are lacking. Owing to human presence, ecosystems are stable, subject to the continuance of agricultural use. The grazing regime is a precondition for the preservation of biodiversity. This makes *Stora alvaret* an outstanding universal asset from the viewpoints of both scientific study and preservation. In addition, the unique, far-flung, flat, and open alvar, with its small-scale variations of habitat and its unparalleled views, constitutes an exceptional environment.

The coastlands and coastal meadows have a unique continuity of use. For thousands of years they have been used as pasturage or for haymaking, as is clearly reflected in both flora and fauna. The coastlands include several highly distinctive plant communities and are an important habitat for a great number of rare and vulnerable bird species.

Stone Age passage graves, monumental cairns from the Bronze Age, prehistoric forts, house foundations, complex systems of stone enclosures with fossil arable land, and large burial grounds from the Iron Age testify to a rich and important prehistory. The present agricultural community has a continuity which partly extends as far back as the Iron Age. The present-day land division, with linear villages in "lawful location" and the distinction between infields and outfields, dates from medieval times. Farmsteads and other buildings are constructed of materials from Öland, with the "Geatish homestead" and windmills forming distinctive features. The churches are medieval and were rebuilt in the 19th century, in response to population growth and agricultural expansion. This coincided with the partition of infields and outfields between the individual farmers, a distribution which remains clearly perceptible today.

The present-day agrarian landscape is characterized by several distinct and historically significant chronological strata which together reflect a considerable chronological depth: 1. the fossil Iron Age, still maintained to some extent by grazing; 2. the far-reaching medieval distinction between infields and outfields, with settlements structured into villages; 3. the land-distribution reforms of the 18th and 19th centuries, resulting in the redistribution of holdings and the erection of stone walls to mark the boundaries between them. Functional relations in the agricultural landscape of southern Öland are very distinct, extremely well preserved, and highly authentic.

The agricultural landscape of southern Öland has a unique cultural tradition which still exists in land use, land division, place names, settlement, and biological diversity.

### Criterion iii

The agricultural landscape of southern Öland is an outstanding example of a landscape illustrating important stages of human history. The still existing medieval land division uniquely indicates the way in which natural conditions dictated the extent of cultivable land at an early stage. The abundant traces from the Iron Age convey a unique understanding of a relict culture and a landscape use which is not detectable anywhere else.

### Criterion iv

## Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. It is also a *cultural landscape*, as defined in paragraph 39 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

## History and Description

### History

The first human beings to come to the island of Öland were the hunter-gatherers who arrived 8000 years ago. A coastal settlement of these people, probably in use for some two millennia, has been excavated at Alby. During this period there is evidence for the domestication of plant and animal species, and passage graves at Resmo, at the summit of Västra Landborgen, testify to permanent settlement in the Neolithic period. Archaeological remains testify to considerable clearance of the alvar at this time.

This process continued during the Bronze Age (1800-500 BC), when farming became more specialized. Technological improvements made possible the cultivation of much larger areas. Stock breeding resulted in the creation of large flocks and herds, which were pastured on the Alvar.

The Iron Age (550 BCE–CE 1050) saw greater developments in farming, with the creation of permanent arable fields and the introduction of dairy farming. The landscape, including *Stora alvaret*, was being exploited intensively in small fields. The remains of many house sites from the Roman Iron Age and Migration Period (the first six centuries CE), with their associated enclosures, are known, some grouped in villages. The Bronze Age social structure of clans dependent upon large flocks was transformed into one of unitary farmsteads producing food crops and hay. Cattle formed the basis of the economy, and there is evidence that hides and leather goods were being exported, along with dried meat. The availability of iron saw stone tools being replaced by metal ones. Metal-working was among the specialist crafts that evolved during the Iron Age, along with comb-making and stone polishing. Fishing, especially for herring, became important, centred on Kyrkhamn, at the southern tip of Öland.

Increasing unrest led to the need to provide protection for the islanders, and five forts (or, more accurately, fortified villages) have been identified. These probably began as places of refuge but developed into permanent settlements. A legislative structure was created, matters of importance being decided by the *Ting*, where rules for the administration of justice were laid down. A military organization, the *ledning*, was created for defence against external enemies.

In early medieval times, from the 11th century onwards, there was a movement from the Iron Age sites, following the introduction of the medieval open-field system and strip farming. The villages migrated to the sites that they still occupy today, sited conveniently between the infields and outfields on elevated, dry terrain, and laid out in linear form along a single street.

The prosperity of the island, due in no small measure to its situation on the main trading route through the Kalmar Sound, is reflected in the imposing stone churches built in the 12th century, such as those at Hulterstad and Resmo.

They were fortified as defence against attacks from marauders. Exports from Öland included horses, oxen, fish, limestone, and slate.

By the 15th century Öland was dominated by land-owning farmers, though the Crown, the nobility, and the monastic orders also owned land there. Gustav Vasa established five “model” manors there for the benefit of local farmers, and also as a centre for stock breeding. Fishing was important, and was of special interest to the monastic communities: Kyrkhamn, at the southernmost tip of the island, was a major centre of this activity. In 1569 Johan III reserved the open spaces on the island for the Crown as a hunting preserve. The farmers lost their commoners’ rights and suffered considerably from depredations by preserved game animals. This restriction survived until 1801, when it was abolished.

The island suffered during the long wars between Sweden and Denmark in the late 17th and early 18th centuries, not least from epidemics, which carried off nearly half the population. As a result farms were deserted and fields reverted to nature. In the latter half of the 18th century the first reform of the land holding system (*storskifte*) took place. This involved the large number of discrete strips held by individual farmers being consolidated into larger holdings. A more radical redistribution (*enskifte*) took place in the early 19th century. Each farmer received an allocation consisting of sections of each of the different types of land within the village boundaries – arable land, meadows, *alvar* land, and coastland; at the same time many of the farmsteads were relocated outside the linear villages. A great deal more land was brought into cultivation at this time.

Heavy population growth led to men travelling to the mainland and into northern Europe annually in search of work. However, it was not until the agricultural crisis of the 1880s that mass permanent emigration to North America took place, reducing the population by more than a quarter; the *alvar* villages were abandoned and farming discontinued. However, the early years of the 20th century saw considerable expansion and diversification of agriculture, including horticultural products and sugar beet, whilst the dairy industry assumed a major role.

The depression of the 1930s saw the abandonment of many farms, and after World War II agriculture underwent rationalization and intensive mechanization. The number of farm holdings decreased as a result of mergers, a process that is still continuing, with concomitant rural depopulation.

### Description

The area proposed for inscription on the World Heritage List comprises the southern third of the island of Öland, covering 56,323ha (including a 6069ha expanse of sea in the Baltic).

The island is a sedimentary formation, the uppermost surface of Ordovician limestone (the alvar). The main topographical feature is Västra Landborgen, a ridge 20-40m high that runs the length of the west side of the island. To the west there is a 3km wide coastal plain, the Mörbylånga Valley, which contains the most fertile soils on Öland. On the east is *Stora alvaret*, covering some 250km<sup>2</sup>: half of this limestone pavement is either exposed or covered by a thin calcareous soil, with other parts covered by raised beaches or lenses of sediment, sometimes overlaid by fen peat. Along the east coast runs Östra Landborgen, a complex of raised beaches.

The villages are almost entirely located along Västra Landborgen. The territory of each territory covers arable lands in the west, the alvar, and a section of coastland on the east.

There is a large number of archaeological sites from the prehistoric period in the nominated area. Passage graves on Västra Landborgen provide evidence for permanent settlement in the Neolithic period. On *Stora alvaret* there is a series of large Bronze Age burial cairns on a line running north-south along ridges in the centre. House foundations and small cemeteries, both here and elsewhere in southern Öland, illustrate the intensive settlement in the Iron Age. *Stora alvaret* is crossed by a network of hollow-ways some 380km in total length; small cairns or standing stones along them are thought to relate to a now disappeared property boundary system.

House foundations are also common in the coastlands and coastal meadows, surrounded by the remains of enclosures formed by stone walls. The existing villages which replaced those of the Iron Age are located on the two ridges - Västra and Östra Landborgen in the west and east respectively. Almost all of the thirteen which exist today are laid out in linear plan, in "lawful location" (*laga läge*): this means that the plan of the entire village was formally laid out in the medieval period, the size of the rectangular plots being proportional to each farmstead's allotment of arable land and pasture. The buildings are in the upper, drier parts of the plots, the lower being occupied by parcels of arable land. There are well preserved examples of this type of village at Lilla Frö, Södra Sandby, Slagerstad, Södra Kvinneby, Triberga, Hulterstad, and Gösslunda.

The typical so-called "Geatish" farmstead is divided into a dwelling yard (*mangård*) and a cattle yard (*färgård*), separated by a wall or fence. Few retain their original layout, owing to changes of use from agriculture and the construction of ancillary buildings. The houses are constructed of wood and weather-boarded. Many of the houses in the dwelling yards were considerably extended and embellished, with upper floors and ornamentation, especially around the doors. Some of the barns retain their original medieval structures, with crown-post roofs.

Most of the farms originally had their own windmills, and 62 examples, almost all of them post mills, still survive. The earliest known mill was built in the first half of the 16th century, but most of the 1730 examples recorded in 1820 were built in the late 18th century, when new land was being cultivated.

In addition to the farmsteads, which were large buildings, each village had attached to it a group of smaller houses (*malmbebyggelsen*) occupied by landless inhabitants. Most of these are now used as weekend cottages.

The central feature of every village was its church. The earliest structures were built in wood, but these were replaced in the 12th and 13th centuries by imposing stone structures with a tower (often supplemented by a second, for defensive purposes), known as "pack saddle churches" because of their outline. The churches at Hulterstad and Resmo still retain their original appearance. The naves of many were demolished during the early 19th century as a result of the marked increase in population. They usually retained their stone towers, to which a lantern was added, the aisled medieval naves being replaced by spacious

barrel-vaulted single-aisled structures from which their name "hall churches" derives.

The late Iron Age fortresses or defended villages at Sandby, Bårby, Triberga, Tråby, and Eketorp consist of massive ramparts and ditches enclosing dwelling houses, workshops, meeting halls, and other communal features. Excavation has shown that they evolved considerably over time from temporary refuges to permanently occupied settlements. The Eketorp fortress has been excavated and restored, so as to illustrate its development over time.

The Royal manor (*Kungsgård*) of Ottenby in the extreme south of the island, established by Gustav Vasa in the 16th century, is still Crown property. The main building dates from 1804; its design was influential elsewhere on Öland and more widely in Sweden.

Agriculture remains the dominant economic activity in the nominated area. The cultivated acreage is around 21,000ha, and there are some 37,000ha of grazing land, 26,000ha of it on *Stora alvaret*. Livestock production is dominated by cattle, but there is also a significant amount of pig and poultry production. Tourism has become an important source of income, especially since the construction of the bridge linking Öland with Kalmar on the mainland.

## Management and Protection

### *Legal status*

The nominated area is protected under various Swedish statutes, most importantly the Cultural Monuments Act, the Planning and Building Act, and the Environmental Code. These extend strong protection to archaeological sites and monuments, historic buildings, and wildlife. The entire island of Öland has been designated a place of national interest under the terms of the Environmental Code, and a number of areas, which cover much of the nominated property, are also designated "places of national interest for natural and cultural values or for outdoor recreation."

### *Management*

Within the nominated area, ownership is principally vested in a large number of private individuals and enterprises, the central government, and the municipality of Mörbylånga.

The Master Plan for Öland, prepared in conformity with the requirements of Chapter 4 of the Planning and Building Act, does not have statutory force, but is intended for guidance in policy- and decision-making. It was adopted in 1991 and is currently being revised. It sets out broad general objectives and possible strategies for safeguarding the cultural and natural values of the island as a whole. The Master Plan for the Municipality of Mörbylånga forms part of this Plan: it is cartographically based and provides more detailed information relating to day-to-day business.

This is supplemented by a detailed development plan for the municipality and area regulations in conformity with Chapter 5 of the Act. These are prepared and implemented by the municipality through its appropriate departments, the work being overseen by the central environmental and heritage agencies.

The Environmental Code contains specific provisions relating to the protection of all aspects of the environment

covered by the statute. These include nature reserves, cultural reserves, landscapes, biotopes, animals and plants, shorelines, etc. There is a general duty of consultation laid upon all those intending activities which might be deemed to damage the natural or cultural environment. Authorization for such acts must be obtained from the Kalmar County Administrative Board, which may refuse permission but is also empowered to offer expert advice.

Agencies with management authority for the nominated area in these fields are the National Heritage Board (RAÄ), the National Environmental Protection Agency, the Swedish Board of Agriculture, the County Administrative Board, and the municipalities.

There is an agreed declaration of intent between the Kalmar County Administrative Board, the Federation of Swedish Farmers, and the Municipality of Mörbylånga in respect of the area covered by the nomination. It is a policy document in which guidelines for future cooperation and objectives are set out.

## Conservation and Authenticity

### *Conservation history*

It is difficult to talk of conscious conservation of the nominated area as such. As “an organically evolved landscape ... which retains an active social role in contemporary society closely associated with the traditional way of life” (*Operational Guidelines for the Implementation of the World Heritage Convention*, para 39), southern Öland has developed in response to social and economic imperatives since prehistoric times. Each evolutionary stage has left its involuntary imprint on the landscape.

However, awareness of the significance of the heritage began earlier in Sweden than in any other country, with the Royal Proclamation of 1666 which laid the foundations of modern cultural heritage protection. Sweden also has a distinguished record in nature protection. The small population of the country in relation to its geographical extent has meant that its landscapes have been under less direct economic or social pressure than most of the developed European countries.

The statutes relating to cultural and natural protection currently in force are all recent, dating from the 1990s, but there has been legislation in this field for at least a hundred years. It may safely be asserted, therefore, that the conservation history of this area has a long and distinguished history.

### *Authenticity*

Successive protective measures have ensured the survival of the significant cultural features of southern Öland with a minimum of extraneous addition or modification. As a continuing landscape, therefore, its authenticity must be considered to be high.

## Evaluation

### *Action by the Advisory Bodies*

A joint ICOMOS-IUCN expert mission visited southern Öland in May 2000.

## *Qualities*

In cultural terms the agricultural landscape of southern Öland is an exceptional one. It preserves abundant traces of its long settlement history, dating back to prehistoric times. It is a remarkable demonstration of human ingenuity and resourcefulness in utilizing a physical landscape and environment that are not at first sight favourable to human settlement and exploitation.

### *Comparative analysis*

In general cultural landscape terms, the evidence of continuous human settlement on southern Öland is not exceptional. Its significance lies in the fact that the limestone pavement (*Stora alvaret*) is one of the largest in Europe, and the overall landscape that has evolved is one of perfect adaptation to difficult physical conditions which is not to be found elsewhere. It is also noteworthy because of the way in which its medieval land-use pattern of villages and field-systems is still clearly visible, which is a very rare survival in northern Europe.

## Brief description

The southern part of the island of Öland in the Baltic is dominated by a vast limestone pavement. For some five thousand years human beings have lived here and adapted their way of life to these physical constraints. As a consequence, the landscape is a unique one, with abundant evidence of human settlement from prehistory continuous up to the present day.

## Recommendation

That this property be inscribed on the World Heritage List on the basis of *criteria iv and v*:

**Criterion iv** The landscape of Southern Öland takes its contemporary form from its long cultural history, adapting to the physical constraints of the geology and topography.

**Criterion v** Södra Öland is an outstanding example of human settlement, making the optimum use of diverse landscape types on a single island.

ICOMOS and IUCN, September 2000