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**UNESCO Region:** EUROPE AND THE NORTH AMERICA

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**SITE NAME:** **The Agricultural Landscape of Southern Öland**

**DATE OF INSCRIPTION:** 2<sup>nd</sup> December 2000

**STATE PARTY:** SWEDEN

**CRITERIA:** C (iv)(v)

**DECISION OF THE WORLD HERITAGE COMMITTEE:**

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): Southern Öland is an outstanding example of human settlement, making the optimum use of diverse landscape types on a single island.

Several delegates, as well as IUCN, emphasized that the site was an outstanding example of a continuing landscape which supports and maintains biological diversity.

The Committee noted the change of name of the property from Södra Ölands Odlingslandskap (The Agricultural Landscape of Southern Öland) to The Agricultural Landscape of Southern Öland.

**BRIEF DESCRIPTIONS**

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.

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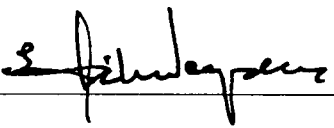
**1.b State, Province or Region:** Kalmar County, Island of Öland

**1.d Exact location:** 56° 20' N, 15° 30' E

Application for inclusion on the  
World Heritage List

The agricultural  
landscape of Öland

Signed (on behalf of State Party)

  
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Date 99-06-01

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## 1 Identification of the Property

### 1a. Country

Sweden

### 1b. County

Kalmar

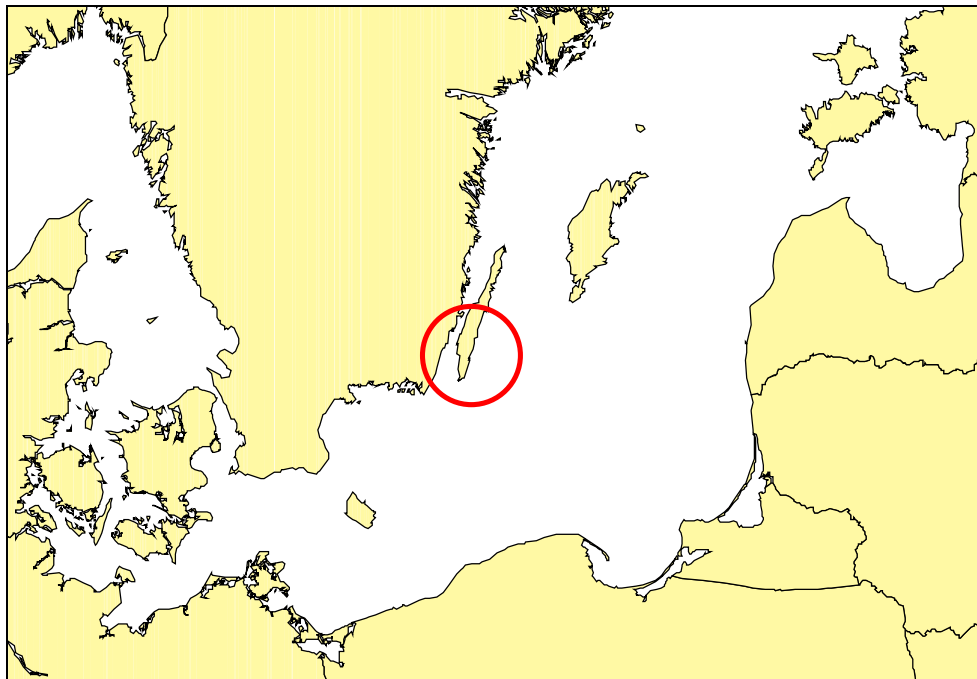
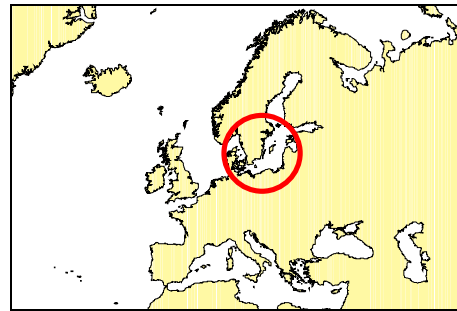
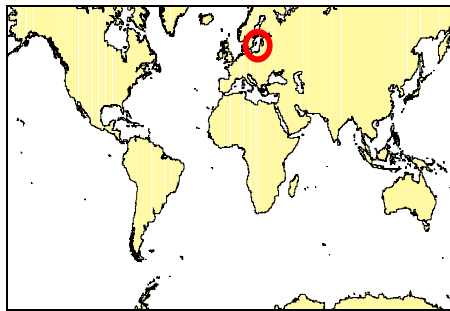
### 1c. Name of the Property

Södra Ölands Odlingslandskap (the agricultural landscape of southern Öland)

### 1d. Location

56° 13' – 56° 36' N

15° 25' – 16° 45' E



**1e. List of maps**

*See App. 1*

Site boundary	Map A
Soils in the south of Öland	Map B
Land use in the south of Öland	Map C
Villages of southern Öland in 1683, in relation to present-day land use	Map D
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Archaeological remains in the south of Öland	Map F
Types of village in the south of Öland	Map G
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Protected areas in the south of Öland	Map I
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**1f. Area of the property proposed for inscription**

56,323 hectares, including a 6,069 hectare expanse of water in the Baltic.

## 2 Justification for inscription

### 2a. Statement of significance

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 in the south of Öland.

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 decipherable, and one clearly perceives the division between in-fields and outlying land, a division which has been constant since the medieval period, by which time all available farmland was being utilised. The outlying land are still used as pasturage. Together the linear villages, the in-fields, the coastal land 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 on continuing, traditional land use. This living agricultural community also includes a residual Iron Age landscape, as well as abundant traces of the Bronze Age and Stone Age. In Öland, therefore, man's agrarian history is made intelligible within a well-defined geo-cultural region.

Stora alvaret, the main expanse of limestone pan, with its remarkable use as common outlying land, 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. Due to human presence, ecosystems are stable, subject to the continuance of agricultural use. The grazing régime 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 variation of habitat and its unparalleled views, constitutes an exceptional environment.

The coastal lands and coastal meadows have a unique continuity of use. For thousands of years they have been used as pasturage or for hay-making, as is clearly reflected by both flora and fauna. The coastal lands 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 pre-history. 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 in-fields and outlying land, 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 in-fields and outlying land between the individual farmers, a distribution which remains clearly perceptible today.

The present-day agrarian landscape is characterised 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 in-fields and outlying land, with settlements structured in to 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-persevered and highly authentic. (*Photos 1 – 20*)

## **2b. Comparative analysis**

“Barely had we touched the Öland shore before we noticed that this land was quite different from the other provinces of Sweden, whereupon we determined to note down all the more carefully everything occurring in this island.” Thus Linnaeus, recording his visit to Öland in June 1741.

Not being much travelled in Europe, Linnaeus compares Öland with other parts of Sweden and finds it remarkable. The Öland which he saw in 1741 is no different, in terms of land use and land division, from the island as we know it today.

Nowhere else in Europe is the medieval landscape, with its distinction between in-fields and outlying land, so distinct and readily decipherable as in the south of Öland. There is something unique about a landscape in which an exceptionally high degree of cultural and scientific interest, with a continuity of several thousand years, is united with a living agrarian landscape in which present-day farmers work the land by modern, efficient methods.

The division of the medieval landscape also includes the linear village plot, which in Öland occupies a “lawful location” (*laga läge*). Nowhere in Europe are there linear villages with such strict, geometrical layouts as in Öland. The linear villages of Öland are laid out in accordance with medieval legislation and Scandinavian justice. The other linear villages of northern Europe, forming a belt from England to Lithuania, have resulted from spontaneous colonisation or other non-judicial regulation. Together, therefore, with the in-fields and outlying land, the linear villages of Öland provide unique testimony regarding medieval land division.

The meadow is the type of land which has diminished most during the present century, in Öland as in the rest of Northern Europe. Today only a fragment remains of the great areas that formerly existed. One of the largest traditionally managed meadows in Northern Europe is the 60-hectare Schäferängan at the far southern end of the island. This features several exclusive and very rare plant species which are heavily dependent on continuous mowing of hay.

As a large, continuous and variegated limestone pan landscape (260 km<sup>2</sup>), Stora alvaret is unique. The mosaic of unfertilized habitats existing on flat limestone bedrock with or without thin soils in a dry climate (limestone outcrops, karstland, temporary pool, alvar lake, dwarf-shrub and lichen heath and sheep’s fescue heath) and those also bearing the imprint of millennia of grazing (alvar dry grassland, calcareous moist grassland) do not occur anywhere else on this scale. These habitats have never been artificially manured.

Smaller alvar areas exist in the north of Öland (60 km<sup>2</sup> altogether), Gotland (totalling 60 km<sup>2</sup>), Västergötland on the Swedish mainland (totalling 0.5 km<sup>2</sup>) and in the northwestern coastal region of Estonia, Dagö, Ösel etc. (totalling 10 km<sup>2</sup>). Areas of similar vegetation are to be found, for example, in Romania, Hungary, Italy, the Balkan peninsula, the south of England (Salisbury Plain, limestone grasslands) and Ireland (the Burren, a karst area of 300

km<sup>2</sup>). These areas, however, have a different climate and have not been subjected to the same traditional grazing practices. In North America, round about the Great Lakes, there are alvar areas reminiscent of the Nordic alvars, but they are mostly inhabited by other species. No other alvar of this magnitude in the world has such a long and unbroken history of grazing as Stora Alvaret.

In the eastern coastal lands there are the remains of an Iron Age landscape in the form of complete systems of house foundations and stone-walled enclosures. Few other places in Europe have such large and continuous areas of continuously farmed coastal lands as in this particular place. Large parts of the coastal lands of south-east Öland are of international class and have been designated as Ramsar sites. For thousands of years the coastal lands have been used for settlement and have provided pasture or pay crops, as is clearly reflected by both flora and fauna. The pastures have never been artificially manured why this environment has a very high level of biodiversity. The coastal lands are one of the most important resting locales in Northern Europe for Arctic Waders and are a nesting spot for a large number of seabirds and waders which depend on continuously grazed or mown habitats.

## **2d. Criteria**

The agricultural landscape of southern Öland is a site which has evolved through the combination and interaction of human labour and the locally prevailing, given natural conditions. The site is of outstanding universal interest from both historical, archaeological, geographical and ethnological points of view.

### iii

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.

### iv

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 of things. 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.

## **The agricultural landscape**

- The site has a unique universal value by reason of several thousand years' continuity of land use and a thousand-year-old land division. The grazing lands of Stora Alvaret and the coastal lands have not been artificially manured and no alien plants have been introduced by man – a unique European record for such a large, continuous area.
- The site represents a clearly defined geo-cultural region with specific geological and climatological preconditions and the cultural identity evolved through the island's history and Baltic location.
- The site has an excellent capacity for illustrating the values and the distinct cultural elements associated with the agricultural landscape.
- Within the property, the traditional form of the agrarian landscape has promoted agriculturally dependent biodiversity through the medium of land use and land subdivision. The traditional form of agriculture is a precondition for the preservation of agriculturally dependent plant and animal communities which include several endangered species.



World Heritage Convention - Swedish Nomination  
**Södra Ölands Odlingslandskap**  
1999-05-03

- The site constitutes organically evolved landscape with on-going land use in the form of modern agriculture. The land-use has evolved in harmony with the natural conditions, which has maintained unique, natural ecosystems and species in the alvar habitats.
- The unique, far-flung, flat and open agricultural landscape affords unrivalled views of outstanding beauty.

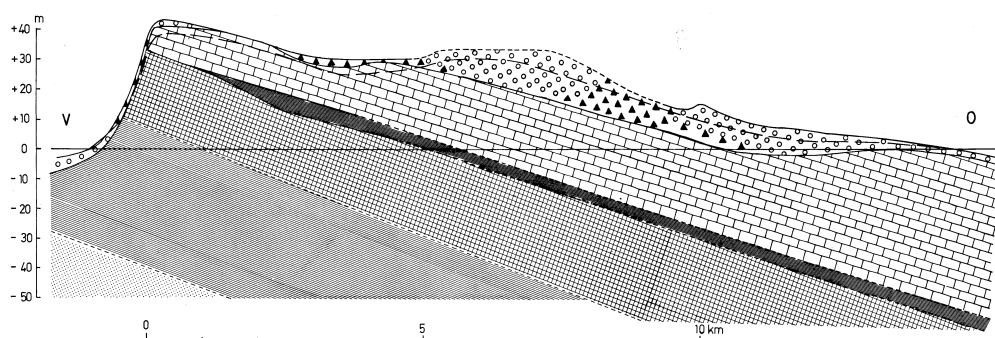
### 3 Description

#### 3a. Description of the Property

Öland, the smallest province of Sweden, is in area the fourth largest island in the Baltic. The proposed World Heritage site is located in the south of Öland and comprises just over one-third of the island. One-quarter of the island's 25,000 inhabitants live here. The number of agricultural enterprises in the south of Öland, 428, is very high by Swedish standards.

#### Topography and bedrock

Öland is made up of rocks formed in the sea by sedimentation during the Cambrian and Ordovician geological periods, between 570 and 440 million years ago. The bedrock slopes gently (by 1 – 2 degrees) eastwards. Galgbacken, 57 metres asl, is located on Västra Landborgen, about 5 km southeast of Mörbylånga, and is the highest point on the island. The sedimentary bedrock of Öland rests on a flat crystalline basement. The oldest sandstones from the early Cambrian (about 570 – 536 million years old), which rest on the crystalline basement, are not visible anywhere in the island. The sandstone is topped by a thick layer of mo or mjäla (silt) clay shales. These shales are divided into three different strata. The lower strata is rich in fossils of trilobites and is called the oelandicus stratum (after the trilobite *Eccaparadoxides oelandicus*). Another trilobite (*Paradoxides paradoxissimus*) has given its name to the intermediate stratum, called the paradoxissimus or tessini stratum. The younger (uppermost) stratum consists of black alum shale which occurs abundantly in the ground surface. Above the skiffer strata are the strata of Ordovician limestone which form the uppermost surface of the island. The limestone strata are often collectively termed orthoceratic limestone. This limestone is grey or red in colour and is extracted in numerous quarries. (Photo 15)



#### LEGEND

- sand and gravel
- till
- limestone
- alum shale
- tessini stratum
- Oelandicus stratum
- lower Cambrian sandstone
- approximate groundwater table

Figure 1. Geological profile from Central Öland. After Pousette and Möller 1972.

The most prominent topographical feature is *Västra Landborgen*, a cliff which is between 20 and 40 metres high and can be followed all the way along the western side of the island. Erosion by the waves has created a cliff whose lower part lies in alum shale with anthraconite lenses from the later Cambrian (roughly 520 million years old). The shale diminishes in thickness from 13 m at Ottenby in the south to 7 m at Mörbylånga.

Along the east coast there is a complex of raised beaches which makes up *Östra Landborgen*. These were formed when the island rose out of the water. The Ancyclus raised beach extends from just north of Borgholm in the north to Hulterstad in the south. It was formed by the Ancyclus Lake (8,000 – 7,000 years ago) and rises to about 13 metres asl at Hulterstad. The Littorina beach, formed by the succeeding Littorina Sea, can be followed from Hulterstad in the southeast of Öland to Ottenby in the south. The Littorina beach is less pronounced in the landscape than the Ancyclus beach and rises only a few metres above sea level.

Northern Europe was covered by an ice cap several times during the Quaternary period. The last ice cap and the succeeding glacial sea retreated from Öland about 11,000 years ago. Traces of the ice are visible, for example, in the form of end moraines, i.e. accumulations of till deposited parallel to the front of the former ice cap, e.g. at Näsby in the south of Öland. Numerous glacial striations in the south of Öland show that the ice moved principally SSW.

Several geological formations are visible on Stora Alvaret, e.g.:

- Dolines. Great “swallow-hole” cavities have been opened in the bedrock as a result of water containing carbon dioxide dissolving the limestone below the ground surface. The limestone then collapsed above the cavities, forming crater-like dolines.
- Karst, which occurs in limestone areas and means that drainage is subterranean. Chemical erosion through water, rainwater especially, undermined the bedrock and formed wide carrens. (*Photo 16*)
- Hogs’ backs, which are especially common in the southern part of the Alvar. These have resulted from the underlying alum shale pushing up the limestone into dorsal-shaped strings.

## **Soils**

Limestone is the commonest rock in the glacial deposits of Öland. Below *Västra Landborgen*, however, the bedrock consists of shale and underlying sandstone strata. The moraine here has a high clay content and forms the foundation of the fertile Mörbylånga plain.

Glaciofluvial deposits in the south of Öland consist mainly of glacial clay. This is the sediment which remained suspended in the water longest when the glacial rivers flowed into the Baltic ice lake. Glacial clay occurs, for example, in the country south of Färjestaden. A layer of glacial clay 1.5 metres thick has been found at Eckelsudde in the southwest.

## **Climate**

The south of Öland has a dry climate with chilly springs and temperate autumns and winters. There is a great deal of sunshine in the summer, with temperatures averaging 17°C, while February, at -1°C, is the coldest month of the year. Öland’s location, in the rain shadow of the southern Swedish highland, gives a low annual precipitation of about 400 mm. The Öland climate is subject to great fluctuations. During spring and autumn, large parts of the thin soils are inundated with rainwater. In summer the large number of windy days, the many hours of sunshine and the low precipitation can lead to periods of extreme drought (Rosén 1995). For some time every winter, Öland is snow-covered. *Fåk* is the name given to a violent, recurrent blizzard mainly coming from the northwest. (*Photos 17 – 20*)

## **The agricultural landscape**

Archaeological remains are an integral part of the present-day agricultural landscape, partly because they give the present landscape a distinct chronological depth, and also because

their survival depends on the continuance of farming. The main areas of settlement during the Late Stone Age were Vickleby and Resmo. Resmo has a small group of passage graves, the construction of which demanded heavy inputs of labour. They must have been produced by an organised community with social stratification. Several large cairns are attributed to the Bronze Age. The eastern coastal lands contain the Iron Age settlements, complete with houses, drover's paths, milking pens and enclosure systems. The whole of this farming system stands out in the short-grazed grass. The houses were rectangular hall structures with stone walls, with the result that they are still visible above ground today. The five prehistoric forts within the site are really not so much forts as fortified villages.

Natural geography is vitally important for understanding the preconditions available to man. The natural conditions for agriculture are more clearly apparent in the south of Öland than anywhere else. The old division into in-fields and outlying land, which originated during the medieval period, still exists and is clearly discernible in the landscape. (*Photo 21*)

Västra Landborgen has on its western side a 3 km wide coastal plain, the Mörbylånga Valley, which contains the most fertile farmland in Öland. Here the villages have evolved an extensive arable landscape in which an argillaceous till is the main cultivable soil. Settlement has been localised on a sloping position at the edge of this *landborg*. (*Photo 22*)

A typical village in the southeast of Öland has Stora alvaret to the west and, on its other side, the coastal lands facing the Baltic, with the arable land strung out in between. Settlement here has been established in dry locations along the Ancylyus beach. In contrast to the western side, which is very much a grain-growing area, the eastern part largely goes in for animal husbandry. This part has the greatest number of residual structures in the landscape, such as clearance cairns, stone walls and drover's paths. Despite differences in preconditions, land use is the same on the western and eastern sides. (*Photos 23 – 26*)

During the medieval period a host of medicinal plants were grown. In Öland these medicinal plants have survived in the vicinity of farmsteads. They are often poorly competitive and dependent on livestock hoof prints for new areas to colonise. Rare farmstead plant species still existing in Öland include, for example, mother wort (*Leonurus cardiaca*), white horehound (*Marrubium vulgare*) and cat mint (*Nepeta catiaria*). The very first breaking of ground, about 5,000 years ago, was followed by the appearance of weeds. Several weeds which were still common only a few decades ago are now in the process of vanishing from the Nordic flora. Öland has many of the species which, elsewhere in the Nordic countries, are severely endangered or extinct. Severely endangered species like rye brome (*Bromus secalinus*), thorn buttercup (*Ranunculus arvensis*), and shepherd's needle (*Scandix pecten-veneris*), can be seen in several of the rye fields of Öland. The road verges of Öland are highly polyspecific, presenting a blaze of many colours. Species occurring in this environment include chicory (*Cichorium intybus*), viper's bugloss (*Echium vulgare*), and yellow camomile (*Anthemis tinctoria*). In many cases the road verge is a refuge for field and wooded pasture plant species which are greatly favoured by farming. This is also an important environment for poikilothermic creatures like insects, snakes and lizards. (*Photos 27 – 28*)

#### ***Stora alvaret***

The word "alvar" refers to the flat outcrops of rock occurring on hard limestone bedrock in a few places throughout the world. Stora alvaret, the largest farmed area of limestone in the world, is 260 km<sup>2</sup> in area and occupies a large part of southern Öland. Just over half the area of Stora alvaret is bare or covered by thin layers of calcareous soil, a quarter by raised beaches and a fifth by declivities of finer sediment, sometimes overlaid by fen peat soils. (*Photo 29*)

No Stone Age remains are known in the alvar lands, but pollen analyses indicate an increase of grass growth during the later Stone Age. Cattle farming now made Stora alvaret a factor in the economy. The first dated remains of human activity are from the Bronze Age. They take the form of large burial cairns on a line running from north to south along ridges in the centre of the alvar. During the later Iron Age an agricultural landscape emerged which we can study from the clearly visible remains in the form of house foundations and small burial grounds. (*Photo 30*)

The whole of Stora alvaret is traversed by old stretches of holloways, i.e. roads which, as a result of wear and tear and erosion, are now situated below the natural ground surface. The total length of this network of roads is estimated at 380 km. On Stora alvaret there are herdsman's huts, the only surviving traces of the pastoral culture formerly existing in Öland. These huts were used by people tending the village flocks of sheep on the alvar. The last village shepherds disappeared at the beginning of this century. *Kummel* is the term given to small cairns or single standing fragments of stone, the function of which is not known to us today. Some of the cairns line older stretches of road, while others have no context that is known to us. Perhaps they are a kind of distance marking or navigation mark. One interpretation is that they might be connected with a property boundary system which we do not know about. (*Photos 31 – 33*)

Written documents from historical times referring to Stora alvaret are few and far between. At the time of his visit to the island in 1742, Linnaeus wrote "it is noteworthy how some plants are able to thrive on the driest and most barren places of the alvar".

The vegetation of the alvar is a unique mosaic of different plant communities with variations of soil depth and pH. By reason of the distinctive vegetation of the alvar, a more detailed description of the plant communities has been given in [App. 4](#). The alvar dry grassland type occurs on high ridges with somewhat deeper overburden and has a neutral to slightly acid soil reaction. Calcareous moist grassland occurs in dales with fine soil and good water retention capacity. Both the calcareous moist grasslands and the alvar dry grasslands have by tradition been grazed. Traces of enclosures suggest that more productive areas have intermittently been subjected to mowing (moist grasslands). In the absence of farming, shrubby cinquefoil, *Potentilla fruticosa*, may come to dominate the moist grasslands and juniper, *Juniperus communis*, the dry grasslands. Cinquefoil and juniper have acquired wider currency on Stora alvaret today, due to the discontinuation of woodcutting and of production of cinquefoil brooms. (*Photos 34 – 35*)

The sheep's fescue alvar type occurs in environments with very thin and calcareous residual deposits. Soil of this kind becomes very parched in summer, while during autumn and spring it is saturated with rainwater. This makes it a very hostile environment for most plant species. As a plant habitat, the residual deposits of the alvar resemble the tundra which extended across Northern Europe in the wake of the ice cap. The limestone bedrock alvar has a very thin soil covering or none at all. The absolutely bare outcrops are colonised from the beginning by crustose lichens and then by cushion mosses. Mainly annuals and stone crops can then in their turn take root in the moss cushions. (*Photos 36 – 38*)

The karst alvar is an extreme environment with deep, open fissures and soil-free limestone slabs. In the bottom of the fissure soil collects, which remains moist and the environment is protected from the wind, from intense solar irradiation and grazing. In the favourable and consistent microclimate of the fissures, several broadleaf species occur which would otherwise not survive on the dry alvar. Snails (*Balea perversa*, *Chondrina clienta*) eat up the algae in the lichens round about the fissures, leaving the limestone bedrock exposed. (*Photo 16*)

"*Vät*", temporary pool, is the periodically water-filled declivities occurring here and there on the alvar. The vegetation cover is thin and the temporary pools are completely dried out in summer. Often they are surrounded by calcareous moist grassland. Alvar lakes form in larger declivities where there is water all the year round. These lakes are seldom more than

a metre deep and are locally referred to as bogs or swamps. The alvar lakes often have an abundance of aquatic plants. Several waders nest in the calcareous moist grasslands adjoining the alvar lakes. (Photos 39 – 40)

#### ***Coastal lands and coastal meadows***

As mentioned earlier, Öland slopes gently towards the east. This has resulted in the formation of wide, flat coastal lands between the main road and the Baltic. The land is almost unaffected by latter-day interference, and it has a well-preserved stock of archaeological remains to illustrate the development of the locality during the Middle Iron Age. The archaeological remains consist above all of house foundations and the remains of enclosures. The house foundations are of the so-called “champion’s grave” type, the name deriving from a mythical view of them as the graves of giants. (Photos 41 – 43)

The coastal lands and coastal meadows have a uniquely continuous farming history. For thousands of years they have been used as grazing land or for hay-making, as is distinctly reflected by both flora and fauna; see [App. 1, map D](#). They are most pronounced on the eastern side of Öland. Outermost towards the sea is the “water beach”, which more often than not is inundated by the sea. This is inhabited mainly by algae, but also by chickweed species, sea club-rush and grey club-rush. Further inland, the “land shore” takes over, and this is characterised by salt-resistant plants such as saltwort (*Glaux maritima*), creeping bent (*Agrostis stolonifera*), and saltmarsh rush (*Juncus maritimus*). Above the high water mark come the “near-beach” areas. Here too the vegetation can be influenced by the seawater through splashing and storm waves. Characteristic plants of this environment are common centaury (*Centaureum littorale*), silverweed (*Argentina anserina*), thrift (*Armeria maritima*), and strawberry clover (*Trifolium fragiferum*). Patches of thinner soils with alvar vegetation also occur in the coastal lands. Here shoreline plants and alvar plants grow side by side. Certain coastal lands have declivities poor in vegetation, known as “*skonor*”. These are formed by a combination of erosion, trampling and bunches of seaweed choking the dense vegetation. The *skonor* are often poorly drained and the water which flows into them can remain stagnant for a long time. In time, as a result of the water evaporating, this environment becomes very salty. Only highly salt-resistant plants like glasswort (*Salicornia europea*), and lesser sea spurrey (*Spergularia marina*), can survive in the *skonor*. The coastal lands are outstandingly important as a resting locale for Arctic Waders and are also important refuges for nesting seabirds and waders. (Photos 11, 44 – 45)

The coastal lands which have been grazed for a long time present distinct tufts of more luxuriant vegetation than the surrounding land. This is due to the yellow ant (*Lasius flavus*), which forms underground communities in which it keeps aphid flies as cattle and lives on their secretions. There may be another domesticated species in the nest, namely the blind Pselaphidae. The ants feed on a fluid which the beetle secretes and in return they feed it. (Photo 46)

#### ***Settlement***

Agrarian settlement in Öland is still very much characterised by the irregularity which once characterised the whole of Eastern Central Sweden and which dates back to the regulation of settlement during the medieval period (in the 14th century). Another factor contributing to regularity is the location of the villages on the eastern side, grouped together as they are along the Östra Landborgen where the main road also passes. There are several villages here which are large by Swedish standards. Along the western side, the village settlement occupies the sloping ground of the Västra Landborgen.

Most of the villages of Öland are linear villages in “lawful location” (*laga läge*). What this means is that a village was laid out, all at once, in accordance with the provisions of medieval laws, and the size of the plot had to match the farmstead’s allocation of arable land and pasture. The plot served as a yardstick for the partition of the land. (Photo 2)

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**Södra Ölands Odlingslandskap**  
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In the linear village, the plots are laid out in oblong rectangles. The village plot is rectangular and enclosed. The plots are laid out in such a way that each one borders on the village street. Settlement is high up on the plot, so that the houses occupy firm ground, while the lower part is occupied by parcels of arable land known as *tomtåkrar* (“plot acres”). The direction in which the plots were laid out was topographically determined. The best-preserved linear villages include Lilla Frö, Södra Sandby, Slagerstad, Södra Kvinneby, Triberga, Hulterstad and Gösöslunda. (*Photo 24*)

In the linear village the farmsteads are close together and the settlement often extends all the way out to the village street. In a few villages the farmhouse overlooks the road and the outbuildings are on the inside of it. In others the opposite applies: shippons and barns overlook the road and can form a wall which makes the farmhouses invisible from the outside. The farmstead plot is entered through a gatehouse. (*Photos 47 – 48*)

Many farmsteads retain the ancient subdivision into a “dwelling yard” (*mangård*) and a “cattle yard” (*fägård*), segregated by a wall or fence. This was the so-called Geatish Farmstead, at one time to be found all over eastern Sweden. The “dwelling yard” consists of the dwelling house, flanked by two side buildings which could be *undantagsstuga* (“set-aside cottage”, e.g. for the current farmer’s aged parents), summer quarters and a brewhouse. The “cattle yard” consists of a shippon, barn and hay barn. On many farmsteads these outbuildings have lost their original function and are referred to as *överloppshus* (“overflow buildings”). In several cases, new outbuildings have been put up behind the older ones or else new cattle sheds built outside the old village plot. In some cases, alteration of existing outbuildings has made possible the continued use of the old buildings in the present-day agricultural enterprise. Other farmsteads have ceased to exist as agricultural enterprises, in which case their outbuildings are for the most part completely unused, but still have an important role in our perception of the village and the landscape. (*Photos 2, 49*)

Human settlement on Öland has been shaped by the conditions and assets of the landscape, and it is still dominated by the use of local building materials. The dwelling houses are built of timber and are weather-boarded. They are painted either with Swedish red or with pale linseed oil paints. From the mid-19th century onwards, the “dwelling yard” buildings became progressively larger, taller and wider. These “hall buildings” were modelled on the vicarages and on the manorial residences of the mainland. The door sections are often beautifully decorated with elaborate pillaster and column surrounds. The outbuildings were mostly constructed of limestone or of timber – mainly oak or pine. Timber buildings were constructed using the bole house or post-and-plank method, to save timber. The roofing materials today are mostly tile, asbestos cement or sheet metal. Medieval building methods remained in use until comparatively recently, and bole-house barns with crown post and centre post are still extant. (*Photos 50 – 53*)

Many farmsteads had a windmill, and 62 windmills survive within the site today. The commonest type of windmill is the post mill, with the whole body of the mill rotating round a post set in the ground. This mill structure is essentially the same as in medieval times. The windmills are located just outside the village, often high up on the edge of the *landborg*, in wind-swept positions. (*Photo 54*)

Overlooking the Baltic is the sjöbodplan (“boathouse flat”), where the farmers’ fishing harbours are located. Limestone potato cellars have been dug into the summit of the Västra Landborgen ridge. (*Photos 55 – 57*)

The village also includes malmbebyggelsen, the settlement area inhabited by the landless. This settlement is segregated from the village plot and consists of small dwelling houses and small outbuildings. Any farm buildings are for the most part smaller than those on the village plot. Today many of these outlying cottages are used by week-enders. (*Photo 58*)

Apart from the ordinary agrarian villages, where the land was worked by farmers, there was, in the extreme south of Öland, a royal manor which was directly controlled by the Crown. Ottenby Royal Manor (*kungsladugård*) was established by King Gustav Vasa in the 16th century, and the present settlement dates from the second half of the 18th century and the beginning of the 19th. The main building was constructed in 1804 to designs by C.F. Sundvall. The Royal Manor was intended as a model farm, but it also set an architectural trend. Ottenby Kungsgård is still owned by the State and is worked by a lessee. (Photos 59 – 60)

The central point in each of the thirteen parishes included in the site was the church. Here the parishioners met every Sunday and this too was where many other important parochial events took place. Most churches today have medieval towers dating from the 12th and 13th centuries. The naves were pulled down in connection with the heavy growth of population during the first half of the 19th century and were replaced with large, single-aisled churches. (Photos 7, 84)

### **Traditional culture/dialects**

The system of village government established several hundred years ago still exists within the site. Each village constitutes a *byalag* which, once every year, most often between Christmas and New Year, holds a village meeting, *bystämman*, to discuss matters of common concern to the villagers, such as road maintenance, common pasture in the outlying land etc. A *byordningsman* is appointed for one year at a time, and the appointment rotates between the villagers (“village part-owners”). Many villages still retain the village chest, a repository for important village documents. Most of these muniment chests date from the 19th century.

A southern Swedish *götamål* dialect, with archaic language elements preserved, is spoken in the south of Öland. Various dialects are discernible between the different parishes.

### **Place names**

Place names together with land use constitute the oldest living cultural heritage we have today. The provincial name of Öland, “the island land”, was written in *Ølandia* in 1178 but “Öland” occurs already in the 9th century, in the travelogue of Wulfstan. The connection with mainland Sweden is reflected by such place names as *Gammelsby*, *Ottenby* and *Seberneby*, beginning with the Svealand man’s names of *Gammal*, *Oami* and *Sigbjörn*. On the other hand Öland has only one place name ending in *löv*, namely *Skärlöv*, an extreme outpost of the *lev*-names of the Danish empire during the Migration Period, *lev* being related to the verb *lämna* (leave) and meaning “inheritance”. The period before the 8th century AD, the Viking era, is represented by names ending in *-lösa*, *Kastlösa* meaning “meadow, grazing land”, and also those ending in *-stad*, meaning “place”, like *Hulterstad* and *Segerstad*. Names ending in *-by*, “homestead” or “collection of farmsteads”, are younger but account for more than 50 per cent of the suffixes of the village names of southern Öland. *Gårdby*, *Vickleby*, *Kvinneby*, *Näsby* are just a few examples. Pre-Christian cult names ending in *-lunda*, “sacred grove”, and *-vi*, “holy place”, are *Frösslunda* and *Karlevi*. The Öland word *alvar* is probably a derivative of *alv*, meaning “layers of limestone, crushed gravel, sand and clay below the topsoil”.

### **Economic life**

Agriculture remains the dominant economic activity in the south of Öland and, together with the food industry, accounts for roughly a third of all job opportunities in the Municipality of Mörbylånga. Within the proposed World Heritage site, the proportion employed in this sector is greater still.

In 1998 the Municipality of Mörbylånga had 428 agricultural enterprises. The cultivated acreage is upwards of 21,000 hectares and grazing land totals some 37,000 hectares, with Stora alvaret making up 26,000. There are various types of agricultural enterprise with a variety of specialities and production represented in southern Öland. The Mörbylånga valley is a “full-field” area, unlike the more small-scale agriculture elsewhere in the south of



Öland. The structures of agriculture have a long historical continuity which is reflected by the agrarian landscape, farm buildings and ownership conditions. Livestock production is dominated by cattle, but pig farming and poultry farming also occur. In 1995 there were 5,595 milk cows, 1,059 beef cattle and 13,057 heifers and calves. Sheep production in the municipality has declined and at present totals 3,514. The head of livestock in Öland, and beef cattle especially, has increased in recent years, one reason for this being the milk subsidies received by the farmers.

Degerhamn has one of Sweden's three cement works, producing high-quality building cement. The local limestone bedrock provides the raw material. There is also a long tradition of stone-quarrying within the site.

Tourism, one of Öland's main sources of income since the end of the 19th century, has greatly expanded following the completion in 1972 of the bridge linking Öland with the mainland. Öland today offers Sweden's widest range of recreational opportunities. The northern part of the island has traditionally attracted bathing tourists, while the natural and cultural environments of southern Öland have developed at a steadier rate. Today there are about 450 enterprises, most of them small ones, depending partly or wholly on earnings from visitors to the island.

The Öland Bridge has also made it possible to commute to Kalmar, with the result that the island's negative population trend has been inflected.

Wind power has been harnessed in a number of places for energy production. Wind is a traditional power source in Öland.

## **Art**

Öland as an art landscape attracts a very great deal of interest, not only among artists but also among photographers, film-makers, writers and poets. The Öland landscape was discovered by artists in about 1870. This coincided with the breakthrough of *plein air* painting in Sweden. Öland had the air, the light and the subtle shifts of atmosphere in which artists were interested. The flow of artists to the island increased during the Second World War. They discovered a light here reminiscent of that to be found in the south of Europe.

## **Nature**

### ***Flora***

The Öland flora is influenced by the dry, warm climate, the great abundance of limestone and the fluctuating water content. Continuous grazing for thousands of years and the wood-cutting of past ages have helped to create the open landscape. The alvar areas of limestone outcrops are dominated today by mosses and lichens, but where there is overburden on the limestone slabs, and also in fissures, an abundant herbal flora occurs. The alvar vegetation types are described in greater detail in [App. 4](#). Polyspecific meadowlands and coastal lands with orchids and many other chalkophilous plants occur in large parts of the site. Farmstead environments and, in particular, roadsides have an abundant flora. The numerous stone walls harbour an abundant lichen flora. There can be fifty or more lichen species on one and the same wall. (*Photos 10, 29, 34 – 40*)

### ***Fauna***

The fauna differs in many ways from that of the rest of Northern Europe. This is above all noticeable in the case of insects, but the bird-life too is distinctive and abundant. Altogether more than 380 bird species have been observed, at least 150 of them nesting regularly. Exceptionally large numbers of migrant birds pass this way during the spring and autumn, and many rarities are then observed. The grazed coastal lands of Eastern Öland are important junctions, as food-seeking and resting places, on the principal migration routes. The southern tip of Öland, with the *Ottenby Bird Observatory* is classic bird country and a concentrated resting place for a numerous and polyspecific bird fauna. Ottenbylund serves as a large gathering point, but the few trees and bushes of the promontory also attract small migrant birds in large numbers. During the autumn, large numbers of waders and geese

arrive from the Russian taiga. Along the broad, flat coast of Eastern Öland they find plenty of resting places and eventually they assemble in the coastal lands and shallow coastal waters of Ottenby. Extensive migrant bird research has been in progress at the observatory since 1946. (Photos 14, 61 – 62)

Species nesting on Stora alvaret and round about its wetlands include Montagu's harrier (*Circus pygargus*), the barred warbler (*Sylvia nisoria*), the golden plover (*Pluvialis apricaria*), the black-tailed godwit (*Limosa limosa*), the oystercatcher (*Haematopus ostralegus*), the black tern (*Chlidonias niger*) and the lapwing (*Vanellus vanellus*). Characteristic birds of the wooded fields include the thrush nightingale (*Luscinia luscinia*), golden oriole (*Oriolus oriolus*), the collared flycatcher (*Ficedula albicollis*) and red-breasted flycatcher (*Ficedula parva*). The eastern coastal lands also have an abundant bird-life during the nesting season. There, and especially on the banks further inland, the rasping sound of the increasingly rare corncrake (*Crex crex*) is to be heard on early summer nights. Other birds nesting near the coastal lands are mostly waders, such as the dunlin (*Calidris alpina*), the avocet (*Recurvirostra avocetta*) and the redshank (*Tringa totanus*), but they also include such species as the little tern (*Sterna albifrons*), the Sandwich tern (*Sterna sandvicensis*), the barnacle goose (*Branta leucopsis*) and the shelduck (*Tadorna tadorna*). The grey partridge (*Perdix perdix*) is a characteristic bird of the Öland agricultural landscape. (Photos 63 – 66)

The mammalian fauna resembles that of the adjoining mainland. Species commonly found include the arctic hare, fox, weasel, elk, roe deer, hedgehog, badger and red squirrel. Two seal species – the grey seal and common seal – occur sparingly along the coasts. (Photo 67)

Öland has certain chalkiphorous and warmth-loving insects which do not occur anywhere else in Northwestern Europe (App. 5). Many of these insects are directly associated with specific host plants occurring on Stora alvaret. Clear host plant connections have been established above all among butterflies (Lepidoptera), true bugs (Hemiptera) and gall midges (Cecidomyiidae). Some of the commoner insects on the Alvar are butterflies like the greyling (*Satyrus semele*) and (*Setina roscida*) hemiptera like *Lygaeus equestris* and *Aradus frigidus* and also grasshoppers like *Myrmeleotettix maculatus* and the alvar grasshopper (*Omocestus haemorrhoidalis*). The pink-winged grasshopper (*Bryodemus tuberculata*) is a spectacular characteristic species of Stora alvaret and, like the alvar grasshopper, has the Siberian Steppes as its principal habitat. (Photo 68)

The field frog (*Rana arvalis*), agile frog (*Rana dalmatina*), common toad (*Bufo bufo*) and lesser and greater newts (*Triturus vulgaris*, *T. cristatus*) are the amphibians occurring in the south of Öland. The agile frog has its most numerous relict occurrence on the island and otherwise is mainly to be found in Central and Southern Europe. The reptiles represented are *Lacerta vivipara*, grass snake (*Natrix natrix*), viper (*Vipera berus*) and smooth snake (*Coronella austriaca*). The sparse occurrences of the smooth snake in the Nordic countries are relict populations isolated from the principal habitat in Central Europe. (Photos 69 – 70)

#### **Unique flora and fauna**

Öland has many flora and fauna species of special interest. For example, there are Northern European species (glacial relicts) as well as southern species which have survived in favourable habitats (temperate period relicts). A large group of species occur at the edge of their distribution or have been cut off from it (disjunct distribution). Several species are endemic, e.g. the vascular species alvar wormwood (*Artemisia oelandica*), Öland rockrose (*Helianthemum oelandicum*) and Öland bedstraw (*Galium oelandicum*); see also App. 5. The natural grazing lands are important locales for many rare fungi. Groups amply represented include earth stars (*Geastrum* spp.), stalked puff-balls (*Tulostoma* spp.), *Disciseda* spp. and “field mushrooms” (*Hygrocybe* spp., *Clavariaceae*, *Geoglossum* spp., *Microglossum* spp., *Entoloma* spp). *Porinia punctata* is dependent on continuous horse grazing, and Stora alvaret has the most important populations in Northern Europe. (Photos 71 – 73)

It is among insects and other invertebrates that one finds the most distinctive fauna elements and those which are unique to Öland. Several species, especially among small butterflies and true bugs (Hemiptera), have here their only known occurrences in the world; see [App. 5](#). Several butterfly species have varieties which are specific to Öland. This is the case, for example, with the greyling species *Satyrus semele* var. *tristis* and *Selidosema plumaria* var. *oelandica*. The island, with its calcareous bedrock, has an abundance of snails. Several snails have their most important European occurrences in Öland and Gotland, e.g. *Catinella arenaria* and *Helicopsis striata*.

Ottenby, at the southern tip of Öland, is an internationally famous ornithological locale. Ottenby and large areas of open coastal land are included in Ramsar, the list of especially valuable areas under the Convention on Wetlands of International Importance especially of waterfowl habitat. One of the largest traditionally managed expanses of meadowland in Northern Europe is the 60-hectare Schäferiängen in the extreme south of Öland. This features several exclusive and very rare plants which are highly dependent on antiquated and continuously farmed meadowland.

### **Fossils**

There are numerous fossils preserved in the limestone and shale strata of Öland. They include:

- *Orthoceratites*, a kind of octopus with an outer shell which lived during the Ordovician. They occur in limestone, look like long, straight horns and in Öland can be anything up to two metres long. (*Photo 74*)
- *Trilobites*, which occur in limestone and were an arthropod existing from the early Cambrian to the Permian period.
- *Cystoids* are also preserved in limestone. These were echinoderms, and are related to the sea urchins of our own time. The fossils of these animals are spherical, 3 – 4 cm in diameter, and the cavity is most often filled with beautiful calcite crystals.
- *Brachiopods* have existed since the Cambrian and still exist in marine environments. These animals resemble mussels, but a stalk secures the animal to the seabed. Brachiopod fossils are mainly found in shale strata exposed along Västra Landborgen. (*Photo 15*)

## **3b. History and development**

### **Pre-history**

#### ***Hunters and trappers and the early farmers ( – 1800 BC)***

The first human beings came to what is now Öland about 8,000 years ago. They were trappers living on hunting, fishing and by gathering such fruits of nature as roots, wild seeds and nuts. The Alby settlement site is one example of a coastal settlement. Possibly places of this kind were only used during the hunting season, when game and fish were at their most plentiful. Archaeologists have recorded traces of round hut bottoms in the form of post-hole circles measuring 2.5 – 3.5 metres. Only three huts had hearths, and the excavators took this to mean that the huts had different functions, as dormitory, cookhouse and workshop. Datings have shown the settlement site to have been in use for about 2,000 years, between 6000 and 4000 BC.

During this period, man began tilling the soil. Single-grain wheat was cultivated in small slash-and-burn clearings. Harvests made man less dependent on the daily search for food. Several of our common livestock species, such as cattle, pig, sheep and goat, originated during the agrarian Stone Age. Child survival prospects improved and family groups became larger. Large numbers of children needed supervision. Work was divided up, with the women staying at home to look after the children and the small cultivated plots. The passage graves of Resmo, on the summit of Västra Landborgen, testify to permanent settlement during the later part of the Stone Age. (*Photos 5, 75*)

***The pastoral peoples (1800 – 500 BC)***

During the Bronze Age, cattle farming, grain cultivation and hunting and fishing developed into more specialised forms. Agriculture was improved by means of technical innovations. The ard made it possible to plough larger areas, which could give bigger harvests and resulted in a surplus. Cattle farming and sheep breeding developed into large herds and flocks which were driven out to pasture in the broadleaf copses of the Alvar, watched by herdsmen who protected them against predatory animals. The climate was so warm that animals could be kept out at pasture all the year round. Just as with present-day pastoral peoples, the standing of the clan in society was related to the size of its herds. Horses were prestigious animals. (*Photos 6, 76*)

***The landed farmers (550 BC – 1050 AD)***

The centuries preceding the birth of Christ saw a transformation of farming. Permanent arable fields and dairy production were introduced, with the result that livestock had to be brought indoors for the winter. The number of animals a farmer was able to keep was limited to the number he was able to keep alive over the winter. Hay-making and leaf-cropping became more important. Extensive pastures were needed, and small, hardy animals. The clan society, resting its status on large herds, was transformed, under the pressure of outward circumstances, into an organisation more committed to ownership of the land for cultivation and hay-making. All through the Iron Age, the wealth of the island was probably founded on cattle farming. Finds of saddler's tools in graves suggest that hides and leather goods were important export commodities. Development proceeded spasmodically. Droughts and failed harvests meant famine for the majority of people. Grain cultivation was on a modest scale.

During this time people learned to extract iron from bog ore and forge it into efficient tools. Iron billets were imported from the Småland (mainland) side. It was not until iron became available to every man that the stone axe finally disappeared from the prehistoric tool kit. A degree of specialisation is discernible. For example, demand for gold ornaments created skilful craftsmen smiths. Crafts like comb-making, metal crafts and stone-polishing are also documented.

The custom of sacrificing in swamps played an important part in religion. The votive gifts consisted of valuable objects and animals. Evidence has also been found of human sacrifice.

The trading and looting voyages of the Viking era could create new riches. Several considerable hoards of silver have been found. Kyrkhamn, on the southern tip of the island, was one of Sweden's most important herring fisheries from the 9th century until the early centuries of the medieval period. Commodity trade was governed by firm market laws and by the establishment of trading posts. Prominent among the 20 or more runestones of Southern Öland is the Karlevi stone, with a unique *skalde* poem in the *dróttkvaett* verse foot, commemorating a man called "Sibbe the wise".

Five prehistoric forts are known: Sandby, Bårby, Triberga, Träby and Eketorp. These have been regarded as fortified villages rather than as forts in the strict sense. The vulnerable position of Öland, and perhaps internal strife as well, led the free-standing farmsteads to join forces for the construction of massive strongholds. In some areas these came to be permanently inhabited. Roman gold coins have been found at Eketorp Fort: about 350 solidus coins and several smaller caches of coins have been found close to house

foundations.

Matters of importance to the population were settled at the *Ting*. The *lagman* ("lawman") was elected by the commonalty of the *Ting*, which consisted solely of the men of the clan. At the beginning of the medieval period, the provincial codes laid down rules for the administration of justice. A *Ting* was regularly held, for example, at Tingstad Flisor, in what is now the parish of Kastlösa. A network of ancient roads converges on this place. Centralist demands for control and order led to an administrative subdivision into *länder* or *lagsagor*, hundreds (*härad*) and villages. This subdivision is documented from medieval times but doubtless goes still further back in time.

A military organisation, the *leding*, was created for defence against external enemies. If necessary this organisation could mobilise both people and ships. The whole of Öland belonged to the *leding* of the Svea provinces. (*Photos 41 – 42, 77 – 83*)

### **The Middle Ages (1050 – 1523)**

The island is already reported in Wulfstan's famous travelogue, from the late 9th century, as belonging to the realm of the Svea. During the early medieval period, Öland appears as a *lagsaga* in its own right with its own *lagman*. No codified Öland law has come down to us. For a long time it was the provisions of the Östgöta Code which applied. Following its christianisation, Öland became part of the great diocese of Linköping. Its importance during early medieval times was due, not least, to the position of the western side on what, at that time, was the internationally important shipping route through Kalmar Sound. The notable stone churches of a clearly defensive character which were built in every parish of the island during the 12th and early 13th centuries clearly indicate continuing economic prosperity and a great need of protection for people and accumulated wealth. During the medieval period, Eketorp Fort was put to commercial use and new buildings were added to it.

The merchant-farmers of Öland continued to trade extensively all through the medieval period, in conflict with the burgesses of Kalmar, who gradually obtained the wholehearted support of the Crown. The island's own products – horses, oxen, fish, limestone and slate – were exported on a large scale, mostly to Northern Germany, but gradually this trade came to be carried mostly in Danish and German ships. The islanders were among those exempted from customs during the Lübeck customs tariff of the 1220s.

#### ***Territorial subdivision***

The hundred (*härad*) is a secular territorial unit. It was the basic unit of the medieval judicial system and of the taxation system as well. Each hundred formed a *tingslag* and had a permanent *tingsplats*. At the beginning of the 16th century there were four hundreds in the south of Öland: Algutsum, Möckleby, Hulterstad and Gräsgård. The hundreds have no function today.

#### ***Parishes and churches***

The oldest stone churches in Öland date from the 12th century and superseded 11th century wooden churches. Hulterstad and Resmo churches are counted among the oldest. Several of the stone churches had towers from an early stage and were given one more tower in the 13th century. This was due to Öland at the time being subjected to repeated attacks by pagan peoples to the south and east of the Baltic, and the churches therefore being transformed into parochial fortresses. These "pack saddle churches" were typical of Öland until the end of the 18th century and the beginning of the 19th. They originated as defensive churches, but in recent years it has been suggested that one of the towers may have served as a repository for important supplies and other articles belonging to the parish. When the pack saddle churches were demolished and replaced by new and bigger buildings, the west tower was usually retained and a lantern added to it. The large, single-aisled, barrel-vaulted church, known as a hall church, was a consequence of the rapid growth of population during the first half of the 19th century. The churches within the site are uniform in appearance: they are rendered stone churches, built of limestone, with stout west towers and large, single-aisled naves in neo-classical style. (*Photos 7, 84*)

The parishes are compactly shaped areas within which the churches, as a rule, are centrally located, with the result that it is very rare for the nearest church not to be the village's own parish church. It is not known how parishes were formed or when the process was completed. Presumably the ecclesiastical boundaries had been finalised by the mid-12th century. The names of the parishes are taken from the villages where the churches had been built, except for Ås, which is the name of a "church place".

At the end of the medieval period, Southern Öland was dominated by landed farmers. Ås, the southernmost parish of the island, was of interest to the Crown: the Kyrkhamn fishing port was located here. The parish of Ås also has a large proportion of monastic farms, and it was above all the fisheries which attracted monastic interest in Öland. The estates of the nobility were mostly in the southwestern part of the island. The fertile soil would have been one factor encouraging magnates to accumulate estates along the Kalmarsund coast. It is also conceivable that some control of Kalmar Sound was in the interests of the nobility.

## **The 16th century**

In historical times, Swedish farmers have occupied a unique social position compared with their counterparts in other European countries. No group of magnates could win the power struggle without the support of the common people. Gustav Vasa, for one, was well aware of this. He established five royal manors in Öland, Ottenby among them. These royal manors were intended to serve as model farms for the local farmers, and also as stock-breeding centres for the court. The King took a close interest in these “byres”, as they were called, intervened very actively in the running of them and kept a close watch on their managers. (*Photos 59 – 60*)

### ***The hunting park***

During the medieval period, hunting took pride of place among chivalrous sports. This was the reason for hunting everywhere in Öland being reserved for the Crown in 1569 by Johan III. His intention was to make Öland a royal hunting park which, in terms of size and abundance of game, would not be second to the hunting parks of continental royalty. During the late 17th century, royal claims were expanded to include all woodland and trees, oaks and berry-bearing trees everywhere in the island. Not even branches could be broken off or leaves harvested. The farmers could not defend their fields against big game animals, because they were not allowed to carry arms. Deer, it is true, were scared off the fields when the cereal was sprouting, but the real torment was the great numbers of wild boar trampling and cropping the grain. The originally very severe penalties for offences against the game laws were relaxed in time, but the claims of the Crown were not relinquished until 1801. The royal park, however, did not impose any restriction on the right of farmers to graze livestock on the land. The severe restrictions imposed by the Crown during this long period are still very much of a living memory among the people of Öland.

## **The 17th century**

The very earliest mapping survey of the south of Öland was carried out by the surveyor Ambjörn Larsson in 1641 – 42. His maps are well-drawn and, for every village, show the size and owner of each farmstead, seed corn quantities in tuns, and crop yields in *lass* (cartloads). (*Photo 85*)

In the autumn of 1675, King Kristian V of Denmark declared war on Sweden. In 1676 Denmark and her ally Holland clashed with the Swedish navy in a sea battle off the southern tip of Öland. During this action the Swedish flagship Kronan blew up and sank. There were several landings on Öland during the summer of 1677 and many farmsteads were looted and torched. King Charles XI of Sweden ordered an inquiry to see how many farms had been devastated. Measurement, mapping and tax assessment of the island were carried out in the so-called “provincial audit” of 1682 – 83. (*Photo 86*)

## **The 18th century**

The wars continued during the first two decades of the 18th century. On top of this, Öland was ravaged by severe epidemics. In the spring of 1710 the majority of infant children died in a measles epidemic, and in the autumn of that year the island was visited by the Asian plague. In his description of Öland, Abraham Ahlqvist writes: “...it is no exaggeration to suppose that, through this infection, the population of Öland has been almost halved”. Due to this loss of population, a large number of farms became deserted, and in 1727 the Riksdag (parliament) ordered a new tax assessment. In just over ten years, all villages throughout Öland were surveyed. (*Photo 87*)

### ***Storskifte***

The first modern land distribution reform, based on Continental and British examples, was *storskifte*, which took place mainly during the second half of the 18th century. The idea was for the large number of strips held by each farmer to be detached from the old medieval village collective and assembled into a few – not more than four – larger holdings. In this way the individual would gain better control over his own land. The state also hoped – in vain – that more land would now be broken and agricultural practices improved. A large

number of villages were redistributed in the south of Öland, most of them between the 1770s and the 1790s, and their in-fields were mapped in detail. (*Photo 88*)

### **The 19th century**

Öland had belonged since 1634 to the Kalmar provincial governorship. In 1817 it became a county in its own right, but this only lasted until 1824. At the time, Öland was going through a period of dynamic agricultural expansion, following the distribution of large out-field areas between its established farms.

#### ***The partitioning of the outlying land***

After the royal park had been abolished in 1801, the King in Council decided, the following year, that the outlying land were to be divided between the parishes of Öland. A committee was set up for this task. No out-field boundaries had ever been legally defined before. For each parish, an inquiry was made concerning the amount of land available for distribution, and for every farmstead the parish was allotted at least four *tunnland* (ca 5 acres) of the outlying land. Once the parochial allocation had been decided, the outlying land were further subdivided, village by village. Factors now taken into consideration included opportunities for watering livestock. After the village had acquired its share of land, it was up to the elders (*byamännen*) to decide how the outlying land were to be divided between each farmstead within the village. Often the out-field lots were used jointly and still are today. After the distribution of outlying land had been finalised in 1819, a great deal of new land was broken, and the numerous stone walls which are such a distinctive feature of the outfields today are a result of this partition.

#### ***Enskifte and laga skifte***

The *enskifte* and *laga skifte* were a more radical form of land redistribution than the *storskifte*. The great majority of villages in Sweden have had their land redistributed by *enskifte* or *laga skifte*, with the result that a large number of farmsteads have had to move out of the old village. In Öland, the *enskifte* and *laga skifte* took place within a relatively narrow period of time, between 1810 and 1850. For topographical reasons, only the land was redistributed, and the linear villages were left intact. All farmsteads received equivalent land lots consisting of arable land, meadowland, alvar land and coastal land. The difficulty of finding water sources counteracted a relocation of the farmsteads, and instead they were allowed to stay put on the village plots. Partly as a result of the land redistribution reforms, a very large proportion of Öland's arable land was broken during the 19th century, when the acreage under the plough more than tripled. (*Photos 89 – 93*)

The heavy growth of population between 1820 and 1880 compelled men especially to go on annual migrations in search of work. In addition to the mainland, these migrations also took them to Denmark and North Germany. The migrations heralded the mass emigration to North America, which was triggered by the agricultural crisis of the 1880s. Between then and 1930 more than 18,000 people emigrated and the population fell from 38,000 to 27,000.

### **The 20th century**

Milk production, originally part of the subsistence economy, became increasingly important as a result of the dairy movement which began at the turn of the century in 1900. Horticultural produce, sugar beet and oil plants began to be grown during the early 20th century and were produced in large quantities at the time of the Second World War. Sweden was not a belligerent in the First World War, and the closure of its borders with the surrounding world led to an upturn for Swedish agriculture. The depression of the 1930s led to a deterioration of agricultural conditions and many people had to leave their farms.

After the Second World War, Öland's agriculture, like that of Sweden generally, underwent a radical process of rationalisation which included mechanisation and a heavy reduction in the number of farmers. The countryside has been depopulated and the number of farming units has greatly declined. In villages which at the end of the 1940s had between five and eight farmers, today there are only one or two left. The number of farming units has been



reduced by amalgamations and by supplementary leases. This development is still going on and more mergers can be expected in future. In Öland, unlike the mainland, no arable land has been set aside.

Rural depopulation has reduced the number of schools, shops and other economic activities. The stagnation of the island's economy was a strong reason for the decision to build the Öland Bridge, officially opened in 1972. This curbed the island's loss of population, but not that of the countryside.

## **The history of the agricultural landscape**

### *The in-fields*

There were villages in Öland already in the Iron Age. From between 200 and 600 AD there are traces of an intensively exploited landscape. Today the large number of house foundations, with their appurtenant enclosure systems, stand as a memento of that time. The enclosures separated the in-fields – arable and pasture – from the outlying land. The in-fields consisted mainly of meadowland. The arable fields were small and were manured regularly. Judging by the large number of enclosures occurring, there would seem to have existed a kind of specialised animal husbandry in which sheep pens, calf paddocks and cow paddocks were segregated from the poorer grazing for young livestock.

Settlement sites have not been static but have varied several times during pre-history (Fig. 2). One possible reason for migration during the Middle Ages to the present-day village location may be the introduction of strip farming. When this happened, migration from a central position in the in-fields to a fringe position between in-fields and outlying land was found to be an advantage. The new settlement locations have often been chosen in high, dry terrain. The village's cultivable land now acquired its maximum extent. What remained was alvar land and coastal land. The in-fields shown in the maps, from the 17th century onwards, make it clear that all cultivable land had been in use since medieval times.

The medieval village included one large, single field where the soil was tilled collectively, which meant that each farmstead had a share in every field. The cultivated acreage during the medieval period was about 12 *tunnland* (ca 15 acres) per farmstead, and the field (*gårde*) consisted mainly of meadowland. The meadowland acreage was 5 – 6 times greater than the arable acreage, and animal husbandry predominated. The in-fields needed to be protected from the grazing livestock and wild animals, and so they were enclosed with stone walls, which are still to be seen in the landscape today.

This is what the villages of Öland looked like all the time until the first half of the 19th century, when the *enskifte* and *laga skifte* land distribution reforms were introduced. The big change which occurred was that all land was divided between the different farmsteads of the village. The farmers were no longer dependent on each other. Instead they worked their lands separately. The settlement, on the other hand, remained on the same plots as before. The idea of the land redistribution was for everyone to have a share in the different kinds of land belonging to the village. Where most villages were concerned, this meant each farmstead acquiring a share of the arable land and meadowland in the village field (*gårde*), as well as a share of the alvar lands and the coastal lands.

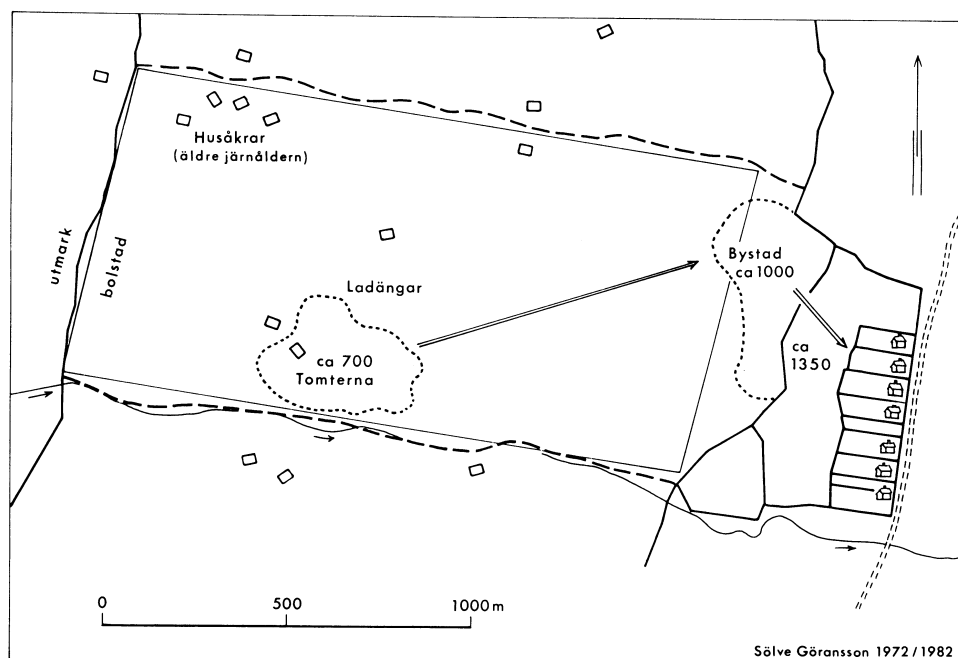


Figure 2. Changes of settlement location in an Öland village. (Göransson 1984)

### **Stora alvaret**

The outlying land were the common land of the villages until 1569, when Johan III declared the whole of Öland a royal hunting park. From then until 1801, when this hunting park institution was abolished, the farmers had only grazing rights in the outlying land. Following the partition of the outlying land, the farming of them became in many cases a common village concern.

The largest area of outlying land is Stora alvaret, which extends between Östra and Västra Landborgen and, ever since prehistoric times, has been open land dominated by grazing. It was during the later Stone Age that people began using the possibilities which Stora alvaret afforded. It was mainly in order to provide pasture for cattle that the land here was cleared and, presumably, burned as well. Resmo, on the edge of Stora alvaret, has the easternmost passage graves in Europe, the best-preserved of which, when investigated in 1908, was found to contain between 30 and 40 human skeletons, flint and bone implements and amber beads. The passage graves testify to permanent settlement at this

time, and the tribe that constructed these megalithic tombs also transformed Stora alvaret from a natural to an agricultural landscape.

Continued grazing during the Bronze Age opened up the landscape still further. Large burial cairns constructed on a north-south axis along ridges in the middle of the limestone pan suggest that this land had now acquired great importance. Monumental graves, visible from a long way away, served to indicate that the area was now occupied.

During the early Iron Age, Stora alvaret came to be heavily exploited. There is a deserted settlement out here comprising groups of house foundations – about fifty altogether – from the periods of the Iron Age known as the Roman Iron Age and the Migration Period, i.e. between about the beginning of the Christian era and 600 AD. Mostly these were small homesteads which, probably, remained in use for a short time only. They were established in these locations as a result of pressure on the available land. In other words, these farmsteads resulted from the “full colonisation” of the superior farming areas along Östra and Västra Landborgen. The foundations of the houses are located where well-springs exist or where damming of the surface water created good pastures and provided water supply. Entire systems of stone-walled enclosures, still traceable as archaeological remains, enclose large, continuous moist stretches in many places. These were specialised units of settlement in which cattle-grazing was the backbone of the economy. West of Möckelmossen there are three groups of house foundations which were excavated during the 1970s. Finds have included bone fragments of cattle, horse, sheep/goat and pig.

Between the early and late Iron Age, the alvar settlement was abandoned, and pollen analyses indicate a certain stagnation of anthropogenic impact on Stora alvaret. The change does not, however, appear to have been so dramatic as to imply a heavy reduction in grazing pressure for any considerable length of time. The Viking era and the early medieval period saw a resurgence of the use of these lands. Additional new settlements and even a couple of villages were established as late as the 18th century.

During the 19th century the level of exploitation rose higher than ever. Everything was enlisted for the survival of the excessively large population of southern Öland. Flocks of sheep from the villages were put out to pasture here, and the area was roamed by herds of feral horses. Game was intensively hunted. Towards the close of the century the scene changed. A large part of the population migrated to the towns or emigrated to America. The alvar villages were abandoned and farming discontinued. At times when the villages were abandoned and grazing suspended, parts of the alvar became overgrown. But the thin alvar soils – gravel and outcrop alvar, for example, have remained open ever since the ice cap retreated about 11,000 years ago.

Only with the abolition of the royal hunting park in 1801 did it become possible to partition the alvar, and between 1816 and 1819 the lands were shared out between parishes and villages. Most of the stone walls, which are today such a characteristic feature of the alvar, resulted from the land distribution. Work on building them was at its height during the late 19th century and some way into the 20th. There are reports of stone-walling on the alvar having continued until as recently as just before the Second World War. The material for these walls was extracted on the spot, from the alvar rock, and there were a very large number of small, shallow – today barely discernible – quarries on the alvar. The “single wall” is the commonest type of stone wall in Öland. As the name implies, this consists of stones piled on top of each other in a single line, sometimes with double rows at the bottom. For stability, the stones have to be bonded. The “single wall” is not very durable, because it is shaky and the stones can very easily fall down when touched, but this in itself can have a deterrent effect on grazing livestock.

***The coastal lands***

The coastal lands are the lands to the east of the in-fields along the eastern coast of Öland and to the west of the in-fields on its western side. These flat lands near the seashore contain large systems of pre-historic stone-walled enclosures, complete with house foundations and burials. The archaeological remains have been little interfered with by farming, and so the existing picture of the extent of the Iron Age settlement is probably accurate. The people of Öland have kept livestock at pasture here at least since the early Iron Age. Following the partition of the outlying land, use of the productive coastal lands was regulated in proportion to the size of farmsteads, whereas the alvar lands were more freely accessible. Until as recently as the 1950s, dairy cows grazed in the coastal lands and were milked on the spot instead of being driven home to the byre.

***Coastal meadows***

Coastal meadows are the shoreline areas where the soil has been good enough to support hay-making for winter fodder. These coastal meadows also had to be enclosed to keep out grazing livestock, and in this way became part of the in-fields, even though they were located some way away from the big farmlands.

***Settlement***

The agricultural settlement of Öland has been profoundly influenced by the regularity which once characterised the whole of east-central Sweden and which dates back to the regulation of settlement during the medieval period (14th century). This regularity is reinforced by the grouping of villages along Östra and Västra Landborgen, which is also where the roads are. Östra Landborgen has several continuous villages which are large by Swedish standards.

Most of the villages of Öland are linear villages in "lawful location" (*laga läge*). In other words, they were laid out in keeping with the provisions of medieval law. It was the width of plot frontage on the village street that decided the width of the cultivation strip in the common field, and this was the legal principle governing the allocation of land within the village. "The plot is the mother of the strip," the saying went. The limited influence of the *enskifte* and *laga skifte* land distribution reforms of the 19th century on the concentrated villages was due to the limited supply of water outside Östra and Västra Landborgen and to the practical positioning of the villages between in-fields and outlying land along the highways.

In the linear village, the plots are laid out in a system of oblong rectangles. The village plot is rectangular and self-contained. The plots are distributed in such a way that each of them borders on the village street. The settlement comes high up on the village plot, to give the houses firm ground to stand on, while the lower part is occupied by arable fields, known as "plot acres". The alignment of the plots was decided by topographical conditions. The best-preserved linear villages include Lilla Frö, Södra Sandby, Slagerstad, Södra Kvinneby, Triberga, Hulterstad and Gösslunda.

In the linear villages, the farmsteads huddle close together, sometimes with their buildings joined together, and often the settlement extends all the way to the village street. In some villages the farmhouse fronts the street, with the farm buildings on the inside. In other villages the opposite applies: barns and shippens front the street and can form a wall concealing the "dwelling yards" (farmhouse etc.) from view. Access to the farmyard is through a gatehouse.

In the Geatish farmstead, the "dwelling yard" is segregated from the "cattle yard" by a fence or wall. The buildings for a farmstead were already specified by law in the Middle Ages. The 1734 Law (Building Code, Chap. II) lays down that a plot shall have both dwelling yard and shippen (*ladugård* – literally "barnyard"). The dwelling yard included, among other things, a cottage with porch and bedroom, a "guest cottage" if the farmstead was a big one, a cellar, a storage barn (*visthus*) and a granary. The "barnyard" was to be segregated from the dwelling yard and must contain stabling, a byre, a sheepcote and pig sty with necessary fodder repositories, as well as barns and hay barn. The division into

“dwelling yard” and “cattle yard”, with a fence in between, is medieval. In Öland there is documentary evidence for this division from the 17th century onwards, but it probably dates back further than that. A report following the ravaging of the island by the Danes mentions that a farmer in Sandby in 1677 had twelve buildings in his dwelling yard and ten in his cattle yard. There was one building for every function, and this so-called “multi-building system” was a distinctive feature of the earlier farmsteads. Dwelling yard and cattle yard in Öland often formed a self-contained unit, and the sole means of access to the farmstead was through a gateway in the cattle yard or a narrow passage between the dwelling house and the side building.

Well into the present century, houses were built with local materials. Dwelling houses are timbered, mostly using the economical bole-house (post-and-plank) system. These buildings were weather-boarded during the later half of the 19th century. The severe shortage of timber also prompted the shipping over of entire timbered dwelling houses from the mainland. Outbuildings like barns and hay barns were also constructed by the bole-house method, while many shippens were built of limestone. In older shippens, the stalls were also built of limestone. Shippens could be rendered with lime mortar from the island. Limestone was also used as paving for the farmyard. In earlier times, dwelling houses were commonly roofed with turf and stone. Tile and sheet metal predominate today, but stone roofs are still to be seen on several boathouses and on potato cellars which are located outside the farmstead plot. Outbuildings used to be thatched but today have mostly asbestos cement or sheet metal roofing. Thatched roofing does still occur in many places, but nowadays, due to changes in threshing technique, reeds are used instead of straw.

Crown-post barns present antiquated designs reminiscent of the houses of the Iron Age. The roof structure is characterised by a central purlin supported by vertical posts along the centre axis of the building. This ridge post or crown post is an archaic feature and buildings of such a kind are rare nowadays. The site has eleven of these crown-post barns.

During the present century the multi-building system has been abandoned in active agricultural enterprises and superseded by larger, multipurpose farm buildings. Since 1970, several of the bigger farmers have expanded their facilities by constructing new farm buildings outside the old village plot, while many have been able to use the long, narrow farmstead plots for new farm buildings and others have incorporated new functions in the old buildings. However, as a result of the structural transformation of agriculture and the diminishing number of farmers, most of the historic farm buildings in the villages are no longer being put to any use.

Wind power has been used in Sweden since medieval times, above all for windmills. Medieval mills were of the post-mill variety, with the whole body of the mill rotating round a post set in the ground. This remains the commonest type of mill in Öland, but tower mills (otherwise known, in Sweden, as “Dutch mills”) are also to be seen. The oldest recorded mention of a windmill on the island dates from 1546, but one or two probably existed already in medieval times. Windmills were especially thick on the ground in the parishes opposite Kalmar and down as far as the parish of Kastlösa. Linnaeus, in his Öland travelogue, wrote that “there are windmills in great numbers all down this western side, positioned up on Landborgen”. At that time the number of windmills per village was far smaller on the eastern side of the island.

There was an upsurge of windmill construction from the mid-18th century onwards, and by 1820 there were no fewer than 1,730 mills, 34 of them “toll mills” and the remainder for household use. At most there were 2,000 mills altogether. This spate of windmill construction was due to the breaking of new agricultural land and growing prosperity during the second half of the 18th century. Every farmer now wanted to have his own mill. It was at this time that Östra and Västra Landborgen acquired their rows of windmills outside the villages. During the present century the mills have lost their original importance, but they remain a conspicuous and characteristic feature of the landscape.

Usually the islanders were both farmers and fishermen. Shoreline fishing was unrestricted, and farm buildings almost invariably included a boathouse. These boathouses were built on a communal “boathouse flat” (*sjöbodplan*). They were built of timber or stone and used as overnight accommodation and for the storage of fishing tackle. One of the distinctive features of the east coast is its eel traps, some of them medieval. These were constructed by carting stones, cleared from the fields, out on to the ice in wintertime. Then, with the onset of spring, the stones sank into the water, forming part of a permanent trapping system. (*Photo 56*)

Potato cellars have been dug into the crest of Västra Landborgen. Potatoes began to be grown on a considerable scale in the early years of the 19th century, and the cellars were built of limestone.

The village also included outlying settlements, *malmbebyggelsen*, inhabited by the landless members of the community – soldiers, tailors and other craftsmen – on a non-freehold basis.

### **3c. Form and date of most recent records of property**

#### **Historical maps**

The earliest historical maps of Southern Öland date from 1641, and the next survey after that came in 1682 – 83. From the 18th century there are two series of maps, namely acreage survey maps from the 1730s and 1740s, and *storskifte* maps from about 1770. *Enskifte* and *lagaskifte* maps, together with out-field redistribution maps, were compiled during the first half of the 19th century. The first general economic map dates from the 1930s and 1940s, and a new version of this was prepared in the 1970s. The mapping of the villages of Öland presents a unique opportunity for tracing land use and land distribution within the site from the mid-17th century down to the present day.

#### **Ölands Stora Alvar (ÖSA)**

Since 1989 the Cultural Environment Function of the County Administrative Board has been engaged in a knowledge-gathering project about the agricultural landscape of Southern Öland. So far this project has resulted in four reports:

1. The main emphasis of the first report is on mapping the extent and focus of the agrarian landscape. A great deal of work has been devoted to transferring information from the earlier cartographical material to modern, present-day maps. This survey has given us a detailed, comprehensive picture of land use during the first half of the 19th century; see map E. (IKOS report 1993:5)
2. The second report concerns animal husbandry during the 19th and 20th centuries. The purpose of this inquiry is to shed light on relations between different grazing animals and the focus and extent of pasturage on Stora alvaret. (IKOS report 1994:1)
3. The third report is a field inventory concerning anthropogenic remains in three villages with lands extending from coast to coast. The aim here was to list and describe anthropogenic remains from historical times which are not included in the register of archaeological remains compiled by the National Heritage Board. (IKOS report 1994)
4. The latest historical inventory is the same as in 3., above, and concerns 13 landscape protection areas on Stora alvaret. (Nilsson, Nilsson 1998)

#### **Programme of preservation for natural and cultural values of the agricultural landscape**

The natural and cultural values present in the Municipality of Mörbylånga have been listed in a report. Special preservation areas for the agricultural landscape have been defined and divided into three classes, class 1 being that with the highest values. (Kalmar County Administrative Board, 1995:20)

#### **Fornlämningsregistret**

An inventory of archaeological remains, by the National Heritage Board (RAÄ), for the economic map of Sweden was started in 1938, following a resolution by the Riksdag

(parliament). That resolution made RAÄ, together with what is now the National Land Survey, responsible for the inventory of archaeological remains. All known permanent archaeological remains with a visible mark about ground were to be listed on the Economic Map on a scale of 1:10,000. Prior to the revision of the Economic Map in 1974, work began on a new inventory of archaeological remains. The Central Board's register of archaeological remains (FMR) contains descriptions and bearings of all remains recorded in the inventory. Some 3,000 archaeological sites have been registered in the south of Öland. This figure includes permanent archaeological remains, cultural remains and prehistoric finds. A number of archaeological sites have been analysed and evaluated.

### **Settlement inventory**

Between 1973 and 1979 a comprehensive settlement inventory was compiled of all buildings in Öland. An analysis and evaluation were carried out with reference to settlement and individual buildings of historic interest, and the results presented in report form. (von Reis 1979)

### **The Öland cultural heritage in a knowledge bank (ÖKA)**

ÖKA is a project aimed at communicating some of the vast fund of knowledge contained in various databases. The initiative for the project came from the Kalmar County Museum, their aim being to gather knowledge concerning the Öland cultural heritage into a database and to make it available to the local population and to tourists.

### **Medieval Sweden (DMS)**

DMS is a compilation and analysis of the earliest Swedish written records for the description of ownership conditions and the taxation of land and water in medieval times. (Axelsson et al., 1995)

### **Vegetation map**

A vegetation map of southern Öland was compiled in 1998. This shows the province in vegetation types, using a classification system based on interpretability in IR-sensitive images. About 80 vegetation classes are shown for the south of Öland.

### **The vegetation of Stora alvaret**

Sjögren (1988) is an omnibus volume dealing with the vegetation of Stora alvaret. Subjects addressed are classification of the vegetation types of the alvar, biomass production in relation to grazing pressure, over-growing by juniper and cinquefoil bushes, and the ecology of chalkophilous lichens.

### **Insects and spiders of Stora alvaret**

A comprehensive inventory of insects and spiders of Stora alvaret was compiled in 1983 for a feature issue of Entomologisk Tidskrift. In addition to the results of the inventory, this also deals with the distinctive character of Stora alvaret from an entomological point of view and with special conservancy measures which should be taken for the benefit of insect life.

### **Birds of the coastal lands**

The bird-life of the coastal lands was inventoried throughout Öland during the spring and summer of 1988. The groups of birds inventoried were ducks, waders, gulls and terns. The results were presented in a report published in 1995 (Pettersson et al., 1995).

### **The bird-life of Stora alvaret**

An inventory of the bird-life of Stora alvaret was undertaken in the summer of 1997. The survey took place in nine landscape protection areas and comprised grebes, ducks and gulls, waders and, among passeriformes, the shrike, the southern race of yellow wagtail and the barred warbler. (Ålind 1997)

### **Öland wetlands inventory**

Wetlands in Öland exceeding two hectares in size have been listed as part of a nationwide inventory. The wetlands have been divided into four classes, ranging from specially high natural values (class 1) to low quantifiable natural values (class 4). (Kalmar County Administrative Board 1994)

### **Characteristic lichens of Stora alvaret**

The characteristic lichens of Stora alvaret have been inventoried on several occasions, e.g. in the summer of 1998. The purpose of this inventory was to improve the state of knowledge concerning the habitat requirements of the lichens, so that greater consideration could be shown in the course of restoration measures. The substrates selected for inventory were gravel alvar, outcrops, karst fissures and ledges. (Fröberg 1989, 1993, 1999)

### **Meadows and open wooded pastures**

The natural meadows and open wooded pastures of Öland, outside Stora alvaret, were inventoried in connection with the nationwide inventory between 1987 and 1990. Altogether 5,000 hectares of natural grazing land were listed and divided into four classes, ranging from highest natural value (class 1) to other objects of a certain value (class 4). (Kalmar County Administrative Board 1991) A follow-up of the meadows and open wooded pasture inventory was undertaken in 1995. (Kalmar County Administrative Board 1997)

### **Ecological research station**

The ecological research station operated by Uppsala University receives researchers both from Sweden and from other European countries. The main emphasis here is on research concerning the flora and fauna of the Alvar, but also on olfactory communication among insects, pollination biology, preservation biology, genetic variation etc. Research at this station has resulted in a large number of theses and scientific articles dealing with the flora and fauna of Öland. (E.g. Nilsson 1981, Rosén 1982, Baur 1991, Bengtsson 1993, Rusch 1993, Prentice et al., 1995, Runyeon 1997, Zamfir 1999.)

### **Database on red-listed plants in Öland**

The Öland Botanical Association (ÖBF) carries out an annual inventory of red-listed plant species in Öland. The results of these inventories are collected in a database to which the County Administrative Board has access in the course of its work.



### **3d. Present state of conservation**

#### **Present-day agricultural policy**

As a member of the EU, Sweden pursues the same agricultural policy as the rest of Europe. The purpose of that policy is to subsidise agriculture by means of direct support to farmers. Over-production of commodities is counteracted by the support not being linked to particular products. The two dominant forms of support are area aid and beef and veal premiums. These are funded by the EU, and the rules applying to them are the same throughout the Union. Livestock production quotas have been introduced for each country, the aim being to restrain production of meat and milk. Regional support exists for disadvantaged agricultural regions, of which Öland is one. Environmental support exists for the encouragement of more environment-friendly production. These supportive arrangements are partly funded by the EU but also by the individual state. The agricultural policy of the EU is currently under discussion at ministerial level. Plans for the structuring of agricultural policy for the next five years, the period between 2001 and 2006, are being discussed, and a decision is expected in the spring of 1999. The intention is to reduce aid payments to agriculture.

Already in 1986 the State introduced support for farmers with valuable hay fields and natural grazing lands. In 1990 this support was expanded to include entire agricultural landscapes. After Sweden became a member of the EU, in 1995, this support was superseded by five different forms of environmental support, partly funded by the EU. The purpose of environmental support is to encourage farmers to engage in production conducive to the preservation and strengthening of biological diversity and cultural environmental values, and also to augment the prevalence of environment-friendly forms of agricultural production. The following forms of support have a bearing on natural and cultural environmental values:

- support for the preservation of natural and cultural environmental values in the cultivated landscape,
- support for the preservation of biological diversity and cultural environmental values in grazing lands,
- support for the preservation of biological diversity and cultural environmental values in hay meadows,
- support for the reinstatement of hay-meadows,
- support for the construction and reinstatement of wetlands and minor watercourses.

The majority of Öland farmers have applied for one or other of the above mentioned forms of support. Developments have shown the financial compensation paid to farmers for managing the cultivated landscape to have produced a positive effect. This is most clearly apparent from the numbers of livestock grazing the meagre alvar lands, because these lands are of little economic importance. Most farmers are in a position to rear their animals less expensively by other means. No support was paid for these lands in 1994. Since the supportive arrangements were introduced, the alvar acreage put down to grazing has increased by 21 per cent. At the same time the total head of livestock within the site has increased, due to compensation also being paid for the management of other natural grazing lands.

#### **Natural and cultural environment programme for Öland**

Work on a single natural and cultural environment programme for Öland has been started by the County Administrative Board. In addition to a report on natural and cultural values, a preservation action plan will also be included. The results will be presented in book form and will be profusely illustrated with photographs and maps.

### **Heritage management programme**

The County Administrative Board's heritage management programme is aimed at managing a number of archaeological sites so as to make them accessible, intelligible and interesting to the general public. Eighteen sites in the south of Öland – prehistoric forts, burial grounds and house foundations among them – are included in the programme.

### **Nature reserves**

Nature reserves have the purpose of preserving biological diversity, conserving and preserving valuable natural environments or catering to the need of areas for outdoor recreation. Nine nature reserves, between them comprising about 1,400 hectares, have been designated in the south of Öland.

### **Nature conservation areas**

Up to and including 1998, areas where special measures, not notably impeding land use, were needed for the protection or care of the natural environment could be designated nature conservation areas. As from 1st January 1999, areas of this kind will be included under the heading of nature reserves. Large resources have been used for restoration, fencing etc. and seventeen nature conservation areas have been designated on Stora alvaret. This means that about 36 per cent (9,100 hectares) of Stora alvaret consists of either nature conservation areas or nature reserves.

### **Landscape protection**

At the beginning of the 1960s the county authorities found that new building development and other working enterprises in the environmentally most sensitive areas of Öland were in need of regulation. Following comprehensive investigations, this resulted, in 1966, in the decision to introduce an Ordinance for the protection of the landscape, e.g. in large areas in the south of Öland. Work enterprises for which permits are required include, for example, the erection of buildings, drainage of ponds etc., road-building and the establishment of dumps.

### **Fauna protection areas**

Fauna protection areas are designated if special protection is needed for an animal species within a particular area. Three fauna protection areas exist within the proposed World Heritage site. One of them is a 310-hectare area at Eckelsudde on the western side, which is a seal sanctuary. The other two are bird sanctuaries and together comprise 208 hectares.

### **Biotope protection**

Smaller areas of land or water of special importance for endangered species or otherwise deserving of protection can be set aside as biotope protection areas. Within an area of this kind, no activity may be undertaken which is harmful to the natural environment. Within the proposed site, 4.4 hectares are protected as a biotope protection site (old hazel meadow).

### **The European Commission Directives on the Conservation of Natural Habitats and of Wild Fauna and Flora, the European Commission Directive on the Conservation of Wild Birds (Natura 2000)**

These directives are a common body of wildlife protection legislation for the EU countries. They establish a common frame for the protection of flora, fauna and biotopes, and prescribe the establishment of a network of special protection sites. These sites are to be preserved with a view to “[maintaining] or [restoring], at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest”. In the south of Öland about 13,900 hectares have been proposed for inclusion in Natura 2000. 1,806 hectares of these are designated as “Bird conservation areas” while 12,477 hectares are proposed as “Natural habitat protection area”. Fifty-five of the species included in the annexes to the Habitats and Birds Directive are represented in the south of Öland, e.g. Montagu’s harrier, alvar wormwood (*Artemisia oelandica*) and *Sisymbrium supinum*.

### **The Convention on Wetlands**

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat, otherwise known as Ramsar, is an international agreement originally aimed at securing biotope for wetland bird species which have been specially subject to persecution through hunting and biotope exploitation. Sweden, which signed the Convention in 1974, has set aside 30 areas. Two of these areas are in Öland and comprise 9,800 hectares, 6,400 of which are located within the proposed World Heritage site.

### **Protected species**

A protected animal species may not be injured, captured or killed, while protected plant species may not be damaged or removed or any parts of them collected. Species are designated for protection by the County Administrative Board. Protected species in the County of Kalmar include yellow Adonis (*Adonis vernalis*), scorpion senna (*Hippocrepis emerus*) and all orchid species.

### **3e. Policies and programmes related to the presentation and promotion of the property**

Linnaeus was the first visitor to record the distinctive features of Öland, in the description of his Öland journey in 1741. Since then many others have testified to the fascination they have experienced when travelling through the Öland landscape. Artists have expressed their powerful experience of the landscape and its distinctive light in their paintings. Through the pronounced enthusiasm of visitors, the people of Öland have come to understand their everyday existence is possessed of a unique quality.

### **Markernas Mångfald**

Markernas Mångfald is an information campaign aimed at preserving and strengthening biological diversity and cultural values of the agrarian landscape. Farming and maintenance occupy the focus of attention. The campaign, which will be continuing until the year 2000, treats the agricultural landscape as an integral whole and focuses on its cultural values, flora and fauna. Markernas Mångfald is part-funded by the EU. Activities have been in progress for three years and have earned widespread appreciation. It is important to be able to define the natural and cultural values of the agricultural landscape, so as to be able to manage and preserve them properly. Farmers have had the opportunity of taking part in several courses. They have also been offered visits from an adviser who has drawn up a management plan for the farm in consultation with the farmer. 150 farmers in the Municipality of Mörbylånga have requested and obtained this service. The target group comprises farmers, together with their families and employees. These are the obvious key persons where natural and cultural values of the agricultural landscape are concerned. The campaign is addressed to *all* farmers in Sweden, not only to those whose lands have very high natural or cultural values or those who are receiving environmental support. All information and counselling are voluntary and free of charge.

Many different people and organisations are involved in Markernas Mångfald. To achieve good-quality counselling, the cultural environment, nature conservancy and agriculture functions of the County Administrative Board are collaborating in this task. The County

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Administrative Board in turn is collaborating with external organisations, such as the Kalmar County Museum, the Federation of Swedish Farmers, local heritage associations, nature conservancy associations, adult education associations and local (municipal) authorities.

### **Träffpunkt Öland**

Träffpunkt Öland is a large and well-attended tourist office and receives about 150,000 visitors annually. At this centre, visitors can see a video programme about the history of Öland and can journey through time in reconstructed historic Öland settings. There is a nature study centre (Naturum) here offering insights into the natural values of Öland.

### **Eketorp Prehistoric Fort**

The prehistoric fort at Eketorp has been excavated, reconstructed and restored to something of its original appearance, with the aim of bringing the prehistoric and early medieval settlement back to life. The fort includes a museum which explains the knowledge resulting from the excavations, and houses have been reconstructed to show how people lived in the fort. There are reconstructions of houses from the Migration Period and the early Middle Ages. Eketorp is intended to encourage an interest in archaeology and cultural history research. It is the biggest project of its kind in Sweden.

### **Ottenby**

The southern tip of Öland has been set aside as a nature reserve and is readily accessible. The reserve includes several amenities for visitors. Both flora and fauna are unique, as a result of the maritime location, many thousand years of human impact and Ottenby's geographical location, in the middle of the migration route for arctic migratory bird species. Ottenby Naturum, constructed in 1996, presents the cultural history of the area and initiates the visitor into the mysteries of bird migration. The old lighthouse community, including the 42-metre-high lighthouse Långe Jan ("Long John"), is an attraction in itself. In the lighthouse garden, the Swedish Ornithological Society undertakes successful and world-famous research into birds and their migratory behaviour. Migratory bird movements are documented daily during the spring and autumn. About 20,000 birds are ringed every year.

### **The "Stora Alvaret" LIFE project**

The EU Life Fund exists for the purpose of jointly financing environment protection and nature conservancy projects which the Member States wish to undertake. The funding is above all intended for practical, result-oriented environment protection and nature conservancy. Since May 1996 the Kalmar County Administrative Board has been engaged in a project entitled "Protection and Restoration of Stora Alvaret". The project has a budget of MSEK 15 and is 50 per cent EU-funded. It runs for four years, ending in December 1999. Within this project a number of nature conservation areas have been formed and extensive information disseminated concerning the natural and cultural values of the alvar (see e.g. App. 3). Most of the budget has been devoted to restoration work, e.g. major clearance operations, livestock enclosures, restoration of stone walls and erection of gates and styles.

### **Protection work**

Work on the protection of areas with high natural and/or cultural values proceeds continuously under the auspices of the County Administrative Board when needed. The County Administrative Board administers the nature reserves and has an annual funding allocation for, among other things, management of the lands and agreements with landowners and farmers. Detailed management plans are drawn up for all protected areas, after consultation with landowners and farmers.

### **Natural and cultural tourism**

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Among the general public there is a high level of awareness of Öland as a province in a category of its own, and this has resulted in both municipalities on the island working out a strategy for the development of natural and cultural tourism. Tourism is a field which the municipal authorities wish to develop, and natural and cultural values are regarded as the prime resources for this purpose. This strategy is aimed at encouraging the involvement of the local population in their own history, at disseminating knowledge of the cultural heritage and at developing hiking trails, cycle paths and bridle paths all over the island.

**Fågelvägen**

Fågelvägen (“as the bird flies” or “the Bird Route”) is a current development project which has been initiated by the local population and partly funded by the EU. Its purpose is to preserve a living countryside through the highlighting, by various means, of natural and cultural values along the island’s southeastern highway.

## 4 Management

### 4a. Ownership

Most of the site is owned by a large number of private persons. In the entire Municipality of Mörbylånga there are at present 428 agricultural enterprises. Other owners comprise the State, municipality and business enterprises.

- Statens Fastighetsverk, Box 2263, S-103 16 Stockholm
- The State, through the agency of the National Environmental Protection Agency, S-106 48 Stockholm.
- Mörbylånga kommun, Trollhättvägen 4, S-386 00 Mörbylånga
- Businesses, associations and foundations.

### 4b. Legal status

#### Summary of statutory provisions affecting land and water use in the south of Öland (January 1999)

<b>KML</b>	<b>The Cultural Monuments Act</b>
Chap. 1	Section 1
Chap. 2	Section 1 <b>Permanent archaeological remains</b> Section 2 <b>Areas surrounding permanent archaeological remains</b>
Chap. 3	Section 1 <b>Historic buildings:</b> Ottenby Kungslaudgård Långe Jan Ottenby Migrant Birds Museum
Chap. 4	<b>Churches etc.</b>
<b>PBL</b>	<b>Planning and Building Act</b>
Chap. 4	<b>Master plan.</b> The master plan is not a formally authoritative document but serves as guidance, and as a basis for decision-making
Chap. 5	<b>Detailed development plan.</b> The detailed development plan officially defines what may be done. It is decided on by the municipality.
Chap. 5	<b>Area regulations.</b> The process here is the same as for a detailed development plan and is based on what is said in the master plan. Area regulations are used to ensure that the purpose of a master plan is achieved. By this means it is possible to lower the building permit threshold and to reserve an area for a particular purpose, e.g. by prohibiting the building of secondary homes in a wind power area.
<b>MB</b>	<b>The Environmental Code</b>
Chap. 4	Sections 1–2   The whole of Öland a <b>national interest</b> in terms of natural and cultural values.
Chap. 3	Section 3     Prohibition of large environmentally disruptive structures. Section 6     Specified areas are of <b>national interest</b> for heritage conservation, nature conservancy and outdoor recreation.
Chap. 7	Section 4 <b>Nature reserves;</b> landscape protection areas (formerly Section 19). Section 9 <b>Culture reserves</b>

		<b>Landscape protraction</b> (pre-dating 1975). Permits required for new building development etc. (Green areas on the decision map. Does not apply to farm buildings, except in the area between the highways; see Section 15).
	Section 11	<b>Biotope protection</b>
	Section 12	<b>Animal and plant protection area</b>
	Section 14	<b>Shoreline protection</b> 300 metres. Applies to the whole of Öland. Exception: Area for which a detailed development plan was drawn up before 1975 and properties of less than 3,000 sq. m. developed as residences.
	Section 21	<b>Water protection area</b>
	Section 28	<b>Special protection or preservation area/Natura 2000</b>
Chap. 8	Sections 1–3	<b>Statutory protection</b> for plants and animals
Chap. 11	Section 9	Permit requirement for <b>water activities</b> , including land drainage, which requires permits under a special section, Chap. 11, Section 13 of the Environmental Code.
Chap. 11	Section 14	<b>Land drainage prohibition</b> , applying to the whole of Kalmar County.
Chap. 12	Section 1	<b>Permit requirement for mineral extraction activities.</b> Does not apply to non-commercial extraction, which, however, is subject to consultations under Chap. 12, Section 6 of the Environmental Code.
Chap. 12	Section 6	<b>General duty of consultation</b> (Chap. 12, Section 6 of the Environmental Code). Activities and measures capable of damaging the natural environment must be made a subject of consultation. The county administrative board may refuse permission but can also offer advice. Compensation can be claimed.
<b>LGS</b>	<b>Street Cleansing and Signage (Special Provisions) Act</b>	
	Section 6	<b>Signage prohibition.</b> In other cases, permission must be obtained from the National Road Administration (50 m from a road) or the County Administrative Board.
<b>TKL</b>	<b>The Off-Road Driving Act</b>	
		Off-road use of a motor vehicle for other than agricultural and forestry-related purposes is prohibited, with certain exceptions.

### **The Cultural Monuments Act**

Sweden has a long tradition of statutory protection for archaeological remains. In 1666 the King in Council promulgated a “Placard and Decree Concerning Ancient Monuments and Antiquities” to the effect that archaeological remains were to be protected from interference.

The Cultural Monuments Act (1988:950) lays down that the protection and care of our heritage is a matter of national concern and a universal responsibility. This Act also contains provisions on archaeological remains, historic buildings and ecclesiastical monuments. It makes the county administrative boards responsible for the supervision of heritage conservation in their respective counties, at the same time entrusting supervision of heritage conservation in the country as a whole to the National Heritage Board (RAÄ).

Chap. 1, Sections 2 and 3 and Chap. 4 of the Environmental Code refer to the heritage as a resource to be conserved and enjoin protection of areas of national interest for heritage conservation.



Provisions on the protection of the cultural environment are also contained in the Planning and Building Act (1987:10), PBL. This requires every municipality to have a current comprehensive plan for the whole of its area. This plan shall furnish guidance for decisions concerning the use of land and water areas and the development and preservation of the built environment (Chap. 1, Section 3). National interests as referred to in the Environmental Code are to be specifically indicated in the master plan (Chap. 4, Section 1).

PBL also contains rules to the effect that alterations to a building are to be sympathetically undertaken, so as to preserve the historical values of the building (Chap. 3, Section 10). In addition, buildings of outstanding interest from a historical, socio-historical, environmental or artistic point of view or forming part of a settlement area of this character, may not be travestied (Chap. 3, Section 12).

The Silviculture Act (1979:429) also contains provisions relating to the cultural environment.

During the 1990s a successive shift has occurred in Sweden in the allocation of roles and responsibilities concerning the care of the cultural environment. Tasks have been transferred from RAÄ at central level to the county administrative boards.

### **The Environmental Code**

The Environmental Code entered into force on 1st January 1999, superseding fifteen enactments which have since been repealed, such as the Nature Conservancy Act, the Environment Protection Act and the Water Act. The aim of the Environmental Code is to promote sustainable development and in this way to ensure present and future generations of a good living environment. The statement of the objective makes clear that nature is not only a human habitat but is also deserving of protection in its own right. The five foundation stones of the Code are:

1. human health and the human environment shall be protected,
2. natural and cultural areas shall be protected and cared for,
3. biological diversity shall be preserved,
4. good management of land and water shall be secured,
5. re-use and recycling shall be promoted.

#### ***Chapters 3 and 4. Provisions on management of land and water***

The whole of Öland has natural and cultural values of such a kind that the Riksdag (parliament) has designated the island a place of national interest, to be protected by law (Chap. 4) against palpable damage. In addition, particular areas of Öland have been designated as places of national interest for natural and cultural values or for outdoor recreation (Chap. 3, Section 6) (see map K). These areas shall as far as possible be protected against measures capable of palpably harming the natural or cultural environment.

#### ***Chapter 7. Protection of areas***

Nature reserves are designated by the county administrative board or the municipality for the purpose of preserving biological diversity, caring for and preserving valuable natural environments or catering to the need of areas for outdoor recreation (Section 4). An area needed for the protection, restoration or creation of valuable natural environments or habitats for species deserving of protection may also be designated a nature reserve. A resolution for the formation of a nature reserve includes certain restrictions on the right of using the area. Restrictions of this kind may take the form of, for example, a ban on building development, planting, hunting and use of pesticides.

A distinctive natural object can be declared a natural monument if it is in need of special protection or care (Section 10). Certain restrictions also apply to natural monuments.

Minor areas of land or water of particular importance to species which are endangered or otherwise deserving of protection can be set aside as biotope protection areas (Section 11). In an area of this kind, no activity may be carried on which is harmful for the natural

environment. Certain biotopes on agricultural land, e.g. avenues, copses, stone walls and minor watercourses (including open ditches) have enjoyed general protection throughout Sweden since 1994.

If special protection is needed for an animal or plant species within a certain area, animal or plant protection areas can be designated by a county administrative board or municipality (Section 12). In these areas, provisions are issued which restrict rights of hunting or fishing or rights of access for the general public or the landowner.

Shoreline protection applies on sea coasts and round lakes and watercourses. In Öland, shoreline protection includes areas of land and water up to 300 metres from the shoreline at the normal average water level. The purpose of shoreline protection is to secure opportunities of outdoor recreation for the general public and to preserve good living conditions on land and in the water for flora and fauna. Within a shoreline protection area, no new buildings may be erected and no existing buildings converted for some different purpose, excavation may not be carried on, and construction or other measures impairing the living conditions for plants and animals may not be undertaken.

An area of land or water can be declared a water protection area in order to protect a groundwater or surface-water resource (Sections 21 – 22).

The Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora and the Directive on the Conservation of Wild Birds comprise the common legislation of the EU countries in the field of nature conservancy. The directives create a common frame for the protection of flora, fauna and biotopes and prescribe the establishment of a network of protected areas called Natura 2000. These areas shall be preserved for the purpose of “[maintaining] or [restoring], at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest”. The Government of Sweden can designate an area as a special protection area under the Birds Directive (Sections 28 – 29). Similarly, special preservation areas can be designated under the Habitats Directive. The European Commission finalises these areas from a list of candidates drawn up by the Swedish Government.

#### ***Chapter 8. Special provisions for the protection of flora and fauna species***

A number of animal and plant species are protected (Sections 1 – 3). Protected animal species may not be harmed, captured or killed, and protected plants may not be harmed, removed or any parts of them collected. Protected animal species in Öland include the smooth snake, the agile frog and the beetle *Cerambyx cerdo*. Protected plant species include yellow Adonis, scorpion senna and all orchid species.

#### ***Chapter 11. Water activity***

Water activities include land drainage, the construction or alteration of dams and the diversion of groundwater or the construction of amenities for this purpose. All water activity is subject to permission under the Environmental Code (Section 9). No work may commence without a permit having been granted. For the preservation of wetlands, a land drainage prohibition applies everywhere in the County of Kalmar (Section 14).

#### ***Chapter 12. Quarrying, agriculture and other activity***

For the extraction of rock, stone, gravel, sand or other soils, a permit has to be obtained from the county administrative board (Section 1). The permit application must be accompanied by an environmental impact assessment. No permit will be awarded if living conditions for any endangered plant or animal species will be impaired by the extraction activity.

If an activity not subject to permission is liable to bring about an essential change in the natural environment, it must be reported for consultations (Section 6). Consultations take place with the county administrative board or the county forestry board. Activities subject to a duty of consultation include, for example, major earth-moving and drainage enterprises,

construction of dams and protective ditching.

## **The Planning and Building Act**

### ***Master plan for the Municipality of Mörbylånga***

The master plan deals with the long-term aspects of land and water use and building development. The current master plan was adopted in 1991 and is currently being revised. Consultations and an exhibition are planned for 1999. The master plan will be divided into two documents: a “visions section” common to both the Öland municipalities and entitled “Master Plan Öland”, and a cartographical section, “Master Plan Mörbylånga”, which is more detailed, for use in the day-to-day handling of business.

“Master Plan Öland” takes natural and cultural values into account through goal formulations and strategies indicating the direction in which the Öland municipalities intend to work. These will be followed up through area-related balances and prioritisations (e.g. with regard to natural and cultural values, the agricultural landscape and linear villages) in “Master Plan Mörbylånga”. This work is to be carried out during the spring of 1999.

### ***Examples of objectives for the protection of natural and cultural values in “Master Plan Öland”***

- In connection with the establishment of agricultural enterprises, natural and cultural values must be taken into account.
- The great natural and cultural values of Öland shall be preserved and developed in the long term as far as is compatible with reasonable condition for the development of such economic activities as agriculture, tourism and energy production.
- Interference threatening natural and cultural values should not be permitted.
- The open agrarian landscape of Öland shall be preserved, traditional land use retained and biological diversity secured.

### ***Examples of strategies for safeguarding natural and cultural values in “Master Plan Öland”***

- Safeguarding alvar lands and coastal lands.
- Safeguarding biotopes deserving of protection.
- Stipulating consideration for and adjustment to the cultural environment in connection with alterations and enlargements of buildings and maintenance of the same.
- Informing residents of natural and cultural values and if necessary drawing up area regulations for the preservation of certain villages.
- Drawing up a cultural environment programme.
- Taking into account the forms of support available within the EU’s different objectives.

### ***Detailed development plan***

The detailed development plan (DP) contains more detailed regulations concerning, for example, new, continuous building development and individual new buildings capable of having a substantial impact on their surroundings. Settlement which is to be changed or preserved can, if necessary, also be regulated in a detailed development plan, e.g. for historic environments.

#### ***Area regulations***

Area regulations can be adopted for limited areas not coming under a detailed development plan, so as to ensure that the purpose of the master plan is achieved or that a national interest concerning the conservation of natural resources etc. is provided for.

#### ***Consultations***

Through consultations with the municipality in connection with the drawing up of the master plan and scrutiny of the plan, the county administrative board is responsible for ensuring that the plan makes provision, among other things, for national interests under the Environmental Code. Similarly, when drawing up detailed development plans, the county administrative board ensures, through the consultation procedure enjoined by the Planning and Building Act, that natural and cultural interests, for example, are provided for.

#### **Common rights of access**

“Everyman’s Right”, i.e. common rights of access, is not a law but a customary right whereby every person is freely entitled to travel over land and water belonging to another. Everyone exercising this right shall observe consideration and caution in his dealings with nature.

### ***4d. Agencies with management authority***

#### ***Allocation of responsibilities and duties relating to the cultural environment***

As a result of parliamentary resolutions, care of the cultural environment is ultimately based on the national objectives of cultural policy. Of these, it is above all the aim of “preserving and using the cultural heritage” which is referable to the cultural environment sector. The Government has determined that the following overarching objectives shall apply to the national organisation for the cultural environment, namely:

- preservation and communication of the cultural heritage,
- strengthening of local cultural identity,
- pursuance of continuity in the development of the external environment,
- counteracting threats to the cultural environment, and
- contributing towards a growth of awareness concerning aesthetic values and historical contexts.

The National Heritage Board (RAÄ) is the central administrative authority for matters relating to the cultural environment and heritage. At regional level the county administrative boards and the regional museums are responsible for the preservation and use of the cultural heritage. The central and regional levels co-operate with each other. Duties relating to care of the cultural environment are divided between four branches of activity, viz:

1. official activities,
2. knowledge production,
3. conservation and
4. public relations.

RAÄ is responsible for central administrative duties, distributes State grants to the county administrative boards for the care of buildings, cultural landscapes and archaeological remains, makes decisions concerning national historic buildings, co-ordinates the cultural environment sector with other sectors of society, and so on.

The County Administrative Boards are charged, within the cultural environment sector, with national administration at county level, except where special administrative duties are entrusted to some other authority. A county expert has to be appointed for the cultural environment sector. As regards official responsibilities, the County Administrative Board supervises care of the cultural environment within its county and makes decisions under most provisions of the Cultural Monuments Act, viz with regard to historic buildings, archaeological remains and ecclesiastical monuments.

The regional museums are responsible for knowledge production, conservation and public relations. Regional State grants are aimed at supporting the museums in their task of collecting, processing and disseminating knowledge concerning the regional cultural heritage, its artistic development and society and the environment generally.

At local level, a fundamental contribution in the cultural environment sector is made by the municipalities, which among other things incur a great deal of responsibility for protection of the cultural environment under the provisions of PBL.

***Allocation of responsibilities and duties relating to nature conservancy and agriculture***

The National Environmental Protection Agency is the central authority for environment protection, nature conservancy included. The purpose of environment protection is:

- the protection of human health,
- preservation of biological diversity,
- promotion of good long-term management of natural resources,
- protection of the natural and cultural landscapes.

The National Environmental Protection Agency unifies and promotes issues dealing with environmental management, at both national and international levels. The purpose of its activities shall be to promote ecologically sustainable development. In relation to sectorial authorities and to county administrative boards and municipalities, the Agency shall work with objectives, guidance, co-ordination and monitoring in relation to environmental management. The Agency has an annual funding allocation to the county administration boards for the maintenance of biodiversity in protected areas.

The Swedish Board of Agriculture is the Government's expert authority in the field of agricultural policy and the authority responsible for the agriculture and horticulture sectors. One major task of the Board of Agriculture is the administration of the Common Agricultural Policy (CAP) of the European Union. The Swedish Board of Agriculture has a central co-ordinating role among the central and regional authorities involved. This means that the Board's main activities are to a great extent concerned with administering and implementing EU legislation and support measures.

Other important tasks of the Swedish Board of Agriculture include implementing stricter animal welfare requirements, combating and preventing the spread of infectious livestock diseases, combating plant pests and promoting a flourishing and varied agricultural landscape characterised by biological diversity.

The County Administrative Boards are charged, within the nature conservancy and agricultural sectors, with national administration at county level. A county expert has to be appointed for each sector. The County Administrative Board has supervisory responsibility and processes permit applications connected to the Environmental Code. Priority is given to the protection of areas with high cultural and natural values. The County Administrative Board is responsible for the handling and inspection of the EU support measures.

At local level, a fundamental contribution in the nature conservation sector is made by the municipalities, which among other things may designate nature and/or culture reserves according to the Environmental Code. The municipalities also have supervisory responsibilities for certain parts of the environmental legislation.

#### **4f. Agreed plans related to property**

An agreement exists between the Kalmar County Administrative Board, the Federation of Swedish Farmers and the Municipality of Mörbylånga concerning the World Heritage site now contemplated. This declaration of intent is a policy document in which the guidelines of future co-operation and objectives for the property are stated.

#### **4g. Sources and levels of finance**

Under the Care of the Cultural Environment (Funding Grants) Ordinance (1993:379), State grants can be made towards the alteration of housing development of historic interest, towards the care of settlement of historic interest, and towards the care of agricultural landscapes, archaeological remains etc.

Support for farmers; see *Present-day agricultural policy*, chap. 3d.

A revised programme of environmental support is in preparation for the coming five-year period (2001 – 2006). The new programme shall amount to a simplification and shall be more flexible, for the benefit of variety in the agrarian landscape. EU environmental support is by far the biggest funding source for management of the agrarian landscape.

For nature conservancy funding, see Chap. 3e.

The National Environmental Protection Agency had at its disposal a special funding allocation – “Measures for the preservation of biodiversity” – for funding measures within its field of responsibilities. Funding from this allocation may be applied, for example, to the financing of land acquisition, encroachment compensation and the management of nature reserves and other nature conservancy objects.

#### **4h. Sources of expertise at training in conservation and management techniques**

##### **Local level**

Öland has several active interest associations in botany, ornithology and entomology, as well as flourishing local heritage associations.

##### **Regional level**

The Kalmar County Administrative Board has experts in several social sectors, e.g. heritage management and nature conservancy. The County Administrative Board is tasked with supervising compliance with current legislation and with contributing towards the development of the regional economy of the County of Kalmar, in which cultural and natural values play an important part.

The Regional Federation, a politically recruited organisation within which all municipalities in the county are represented, is responsible for the funding allotted for regional development.

The Kalmar County Museum has experts on building conservation, archaeology and the history of the agrarian landscape. The museum provides free advisory services in building conservation and is actively concerned with knowledge production in the above mentioned fields.

### **Central level**

Eketorp Prehistoric Fort is run by the National Heritage Board. Exhibitions and educational activities relating to the pre-history of Öland are provided there.

Ottenby Naturum is owned by the National Environmental Protection Agency and has mainly ornithological expertise. Amenities include exhibitions, video presentations and guided tours.

Naturbokhandeln or Stenhusa Bod is operated and owned by the Swedish Ornithological Society (SOFAB). It has a residential training centre with a library, as well as a shop which contains exhibitions and sells non-fiction on the subjects of flora and fauna, with special emphasis on ornithology.

The Uppsala University Ecological Research Station engages in research and teaching with reference to the natural history of Öland.

## 5 Factors affecting the property

### 5a. Development pressures

#### Agriculture

The main criterion of the proposed World Heritage site is land use and land division in a living agrarian landscape where modern agriculture is practised. There must be continuing possibilities for agriculture to develop in step with the times. At the same time, development of this kind must proceed hand in hand with preservation of the unique natural and cultural values existing within the site. It is very important that the landscape should not stagnate and turn into a relict agrarian landscape. In order for the agrarian landscape of southern Öland to be preserved and to survive, there must be farmers and sustainable animal husbandry. Öland is above all a milk-producing region and greatly dependent on the profitability of this production. In the event of a serious decline in profitability, the whole of this unique agrarian landscape would be threatened.

Arable farming varies within the site. Southern and Eastern Öland have an arable farming which is adapted to milk production. Farms mainly cultivate feed for their own livestock. Intensive plant growing is conducted in the Mörbylånga valley. Specialised crops like onions, potatoes, strawberries, sugar beet and brown beans are grown for sale. Cereal production is also considerable. The area aid provided at present makes an important difference to profitability. If it is discontinued, cereal production, in the first instance, will be threatened. In addition, parts of agriculture may be threatened if rationalisation of the sizes of holdings becomes impossible.

The proportion of meadowland has declined steeply during the present century. Sweden today, according to the Meadow and Open Wooded Pasture Inventory, has no more than about 3,000 hectares with high nature conservancy values. Of these, Öland accounts for no less than 200 hectares. The flora and fauna associated with meadowland are endangered. In order to preserve the remaining meadows, compensation has to be paid for the additional labour which their maintenance requires. At present environmental subsidies are being paid. If this compensation is discontinued, large areas of meadowland will disappear.

Fundamentally, the profitability of livestock production has a crucial bearing on the feasibility of grazing both the coastal lands and Stora alvaret. The outlying land, and above all Stora alvaret, are at present entirely dependent on the payment of maintenance subsidies. Should these be reduced, the areas concerned will be manifestly endangered. From the mid-1980s onwards, the number of grazing animals on Stora alvaret declined heavily. Since the subsidies were introduced, numbers have increased. In order for livestock to remain on these lands, some form of long-term support will be necessary. The present supportive arrangements are valid for five years at a time, which is a short planning time for an agricultural enterprise.

Öland has an abundance of stone walls. Most such walls on arable land have resulted from the land redistributions of the 19th century, when stone walls were put up to mark the new property boundaries. As a result of the arable land being divided between many farmers, the stone walls came to be positioned close together, as they still are in many places. All stone walls have come under biotope protection since 1994. For the efficient and competitive agriculture of today, stone walls are often an obstacle to farming operations, slowing them down and, consequently, making them more expensive. The large size of modern agricultural implements also makes small stone-walled fields difficult to cultivate. The desire of the community to preserve stone walls for their biological and historical value often comes into conflict with the farmer's need to rationalise his operations. An inventory of the stone walls is planned by the County Administrative Board in order to focus attention on these problems.



As a result of structural rationalisation in agriculture, many farm buildings today are no longer being used. These buildings mean a great deal for the character of their villages, but their long survival is threatened. Their retention can be promoted by means of new applications or refurbishment measures which national and local authorities are in a position to support. Measures of this kind include, for example, the refurbishment of windmills and potato cellars. (*Photos 94 – 99*)

## **5b. Environmental pressures**

### **Environmentally hazardous activities**

There are a few industrial undertakings in the south of Öland with environmental impact. Municipal wastewater processing plants exist in Mörbylånga and a number of smaller communities. A rubber factory, a cement works and a chicken processing plant in Mörbylånga have negligible environmental impact.

### **Precipitation of air pollutants**

Regionally distributed air pollutants impact on Öland. Nitrogen compounds are precipitated at a rate of about 1,000 kg per km<sup>2</sup> annually, according to measurements taken during the 1990s. This is far more than under pre-industrial conditions and provides a nutrition supplement to unfertilised lands. Within the scope of European co-operation, sulphur emissions have been heavily reduced and nitrogen emissions are also to be curbed.

### **Oil slicks**

The waters to the east of Öland are traversed by many ships. Every year dozens of oil slicks appear, with one or more usually causing damage to the Öland coast. Seabirds are especially hard hit and bathing beaches are damaged. The coastguard and rescue services carry out prevention and clearance operations in keeping with predefined plans.

### **Nuclear power stations**

There are thirteen nuclear power stations within a 600 km radius of Öland, most of them in Western Europe. The Swedish Radiation Protection Institute carries out continuous measurements of radiation in Sweden and co-operates with other countries. In the event of an emergency, a contingency organisation begins to operate.

### **Agriculture and wind farms**

Farms with large numbers of livestock are subject to the award of permits under the Environmental Code, and the same applies to wind farms. The south of Öland has several facilities in both categories.

## **5d. Visitor/tourism pressures**

By tradition, the main focus of tourism in Öland has been on the northern part of the island. Tourism in Southern Öland has been limited to a few attractions such as Ottenby Naturrum and Eketorp Prehistoric Fort. Tourism in the area now under consideration is also confined to individual tourism in the form of hiking and bicycle tours, together with a large number of orchid and botany tours. Birdwatching is a major activity in the spring and autumn.

***Positive impact***

- Due to the south of Öland already being a well-known tourist attraction, awareness of its values is sustained among both visitors and permanent residents.
- Knowledge and insight among permanent residents concerning the values of the site augment the prospect of local self-respect.
- Local, regional and national resources, as well as EU funding, have been channelled into the area in a variety of forms.
- A large number of small entrepreneurs live partly or wholly by tourism. Services, commercial amenities, public transport, road networks etc. are maintained all through the year or for parts of it by means of extensive tourism.

*(Photos 100 – 103)*

***Negative impact***

- Efforts to develop hiking trails and cycle paths have in certain cases led to conflicts with landowners.
- A limited amount of trouble is caused by visitors stealing fossils, birds' eggs, protected flowers and parts of archaeological remains.
- The ancient custom of "Everyman's Right" (i.e. common rights of access) in Sweden is sometimes a cause of misunderstanding on the part of foreign visitors.

***5e. Number of inhabitants within the property***

At 31st December 1997, the site had about 5,700 permanent residents. There are 428 agricultural enterprises in the south of Öland.

## 6 Monitoring

### 6a. Key indicators for measuring state of conservation

#### Agriculture

*Farmers/agricultural enterprises in the Municipality of Mörbylånga in 1998*

No. Farmers/agricultural enterprises	428	<b>Source</b>
Age structure*		EU environmental support 1997 EU environmental support 1998

Age (Years)	Percent (%)
< 25	3
25 – 34	13
35 – 44	23
45 – 54	27
55 – 64	20
> 65	14

\* 45 agricultural properties are excluded because they have been reconstituted as business enterprises.

*Cultural land in the Municipality of Mörbylånga*

Swedish statistics on cultural land distribution in Sweden is available from 1865 and onwards. However, the classification of the land has varied between years which makes comparisons difficult.

Type of land	Area (hectares)	Source
Under cultivation	12,113	Statistics Sweden 1995
Meadows in use	222	EU environmental support hayfields, 1997
Grazing land in use (total)	19,512	EU environmental grazing 1997
Grazing land in use (natural grazing)	18,586	EU environmental grazing 1997

*Number of livestock in the Municipality of Mörbylånga*

Swedish statistics on the number of livestock in Sweden is available from 1865 and onwards.

Type of livestock	1995 <sup>1)</sup>	1927	1865
Dairy cows	5,595	7,603	4,985
Beef cattle	2,059	no information	no information
Oxen and bulls	0	269	4,920
Calves < 1 year	6,354	6,422 <sup>2)</sup>	6,419 <sup>2)</sup>
Sheep (ewes, rams, lambs)	3,514	3,454	6,768
Horses	no information	4,535	4,227
Pigs	9,638	5,584	no information

<sup>1)</sup> No statistics are available for the period following 1995, the reason being that agricultural statistics are compiled only at five-yearly intervals.

<sup>2)</sup> including replacement cattle

#### Heritage management

No. archaeological sites managed	18
No. sites receiving building conservation with State grants, 1993 – 98	337

## Nature conservancy

Protection of areas	No.	Area (hectares)
Nature reserves	9	1,384
Nature conservation areas	17	9,100
Fauna protection areas	4	518
Biotope protection areas	1	4
Special protection areas, Bird Directive	4	1,806
Proposed as Special protection areas, Habitat Directive	25	12,477
<i>Total</i>	<i>60</i>	<i>25,289</i>

Flora and fauna are monitored regularly within the nature conservation areas of Stora alvaret. There are, for example, several hundred permanent test areas where vegetation recovery can be studied annually following different types of clearance (manual clearance, mechanical clearance, burning and various combinations of these methods) and simultaneously increases of grazing pressure. The bird-life of the coastal lands and alvar is inventoried at regular intervals.

The detailed vegetation map of Öland provides opportunities for monitoring vegetation changes over time with the aid of air photographs.

### Tourism

The south of Öland has three quantifiable points where visitors from outside are concerned.

- Träffpunkten, the largest tourist office on the island, located at the bridge abutment, can provide a measuring point by means of random surveys.
- Traffic on two out of three roads leading south is measured continuously by the National Road Administration. These observations also include commuter traffic to and from the mainland.
- The number of cars parked at Ottenby Naturum and tickets of admission purchased for Eketorp Prehistoric Fort are the only quantifiable data for tourist attractions.

### **6b. Administrative arrangements for monitoring property**

Monitoring of agriculture is being done by Statistics Sweden and is compiled at five-yearly intervals. Kalmar County Administration is responsible for the monitoring of nature conservancy and heritage management. The main part of this monitoring is done annually. The supports for farmers, connected with the Common Agricultural Policy (CAP) of the EU, are handled by the Swedish Board of Agriculture and the applications for these supports are used to make annual compilations.

### **6c. Results of previous reporting exercises**

A number of inventories concerning nature, cultural monuments, tourism etc. have been done over the years. These inventories are in most cases not carried out regularly and are therefore not presented here. The reports are available in different publications, and a number of them are included in the bibliography (see e.g. Axelsson et al. 1996, Beskow Sjöberg 1987, Boström 1966, Hagberg et al. 1991, Linnaeus 1745, Meschke 1997, Nelson 1909, Raphael 1913, Schück 1953, Wallinius 1943).

There are unique statistics, compiled for each parish in Sweden between 1620 and 1640, on the mean number of livestock per household. In the parishes of Gårdby and Sandby (in the northeastern part of the nominated area), for example, there were 2.3 oxen, 2.6 steers, 4.5 cows, 2.6 heifers and 9.0 sheep per household (Riksarkivet, Utsädes- och boskapslängder). For other previous reports on cultural land and livestock, see chapter 6a.

## 7 Documentation

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- Åhstrand, P.** Byordning för Öland, fastställd den 7 juni 1760 av landshövding C G von Roxendorff.
- Ålind, P.** 1997. Vart har Stora alvarets vadare tagit vägen? Calidris 26: 81–105.
- Ölands hembygdsförbund.** 1994. Ölandsperspektiv. Kalmar


#### ***7d. Addresses of archives containing registers, inventories etc.***

- Folkklivsarkivet i Lund, Finngatan 8, S-223 62 Lund, Tel 046-222 75 60
- Kalmar läns museum, Box 104, S-391 21 Kalmar, Tel 0480-563 00
- Landsarkivet i Vadstena, Box 126, S-592 23 Vadstena, Tel 0143-130 30
- Lantmäterimyndigheten, Box 510, S-391 25 Kalmar, Tel 0480-158 60
- Lantmäteriverket, S-801 82 Gävle, Tel 026-63 30 00
- Länsstyrelsen, S-391 86 Kalmar, Tel 0480 -820 00
- Mörbylånga kommun, Trollhättevägen 4, S-386 00 Mörbylånga, Tel 0485-470 00
- Naturvårdsverket, S-106 48 Stockholm, Tel 08-698 10 00
- Nordiska museet, Box 27820, S-115 93 Stockholm, Tel 08-51 95 60 00
- Riksantikvarieämbetet, Box 5405, S-114 84 Stockholm, Tel 08-51 91 80 00
- Riksarkivet, Box 12541, S-102 29 Stockholm, Tel 08-737 63 50
- Stifts- och gymnasiebiblioteket i Kalmar, Box 610, S-391 26 Kalmar, Tel 0480-835 73
- Uppsala Folkminnesarkiv, Dag Hammarskjölds väg 19, 752 37 Uppsala, Tel 018-65 21 60
- Uppsala universitets Ekologiska forskningsstation, Ölands Skogsby 6280, S-386 93 Färjestaden, Tel 0485-381 58



## **8 Signature on behalf of the State Party**


# Boundaries of the property

 Property boundary





Map A


# Soils of southern Öland


 Property boundary

 Till

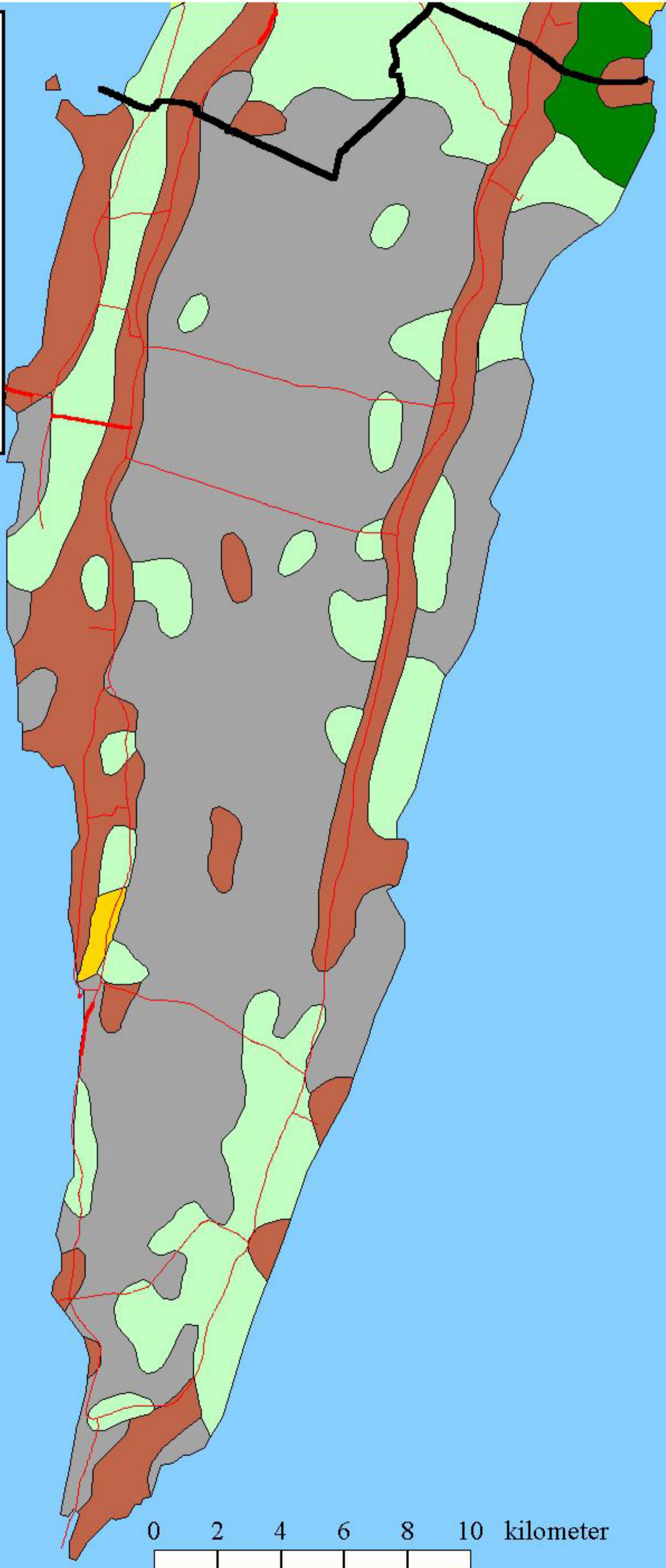
 Clay till

 Bare rock or thin overburden

 Glaciofluvial sediment

 Fine sand, sand, gravel

Source: SGU



Map B

# Present-day land use in southern Öland



Property boundary



Central locality



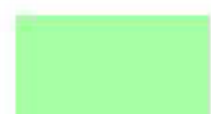
Grazing land



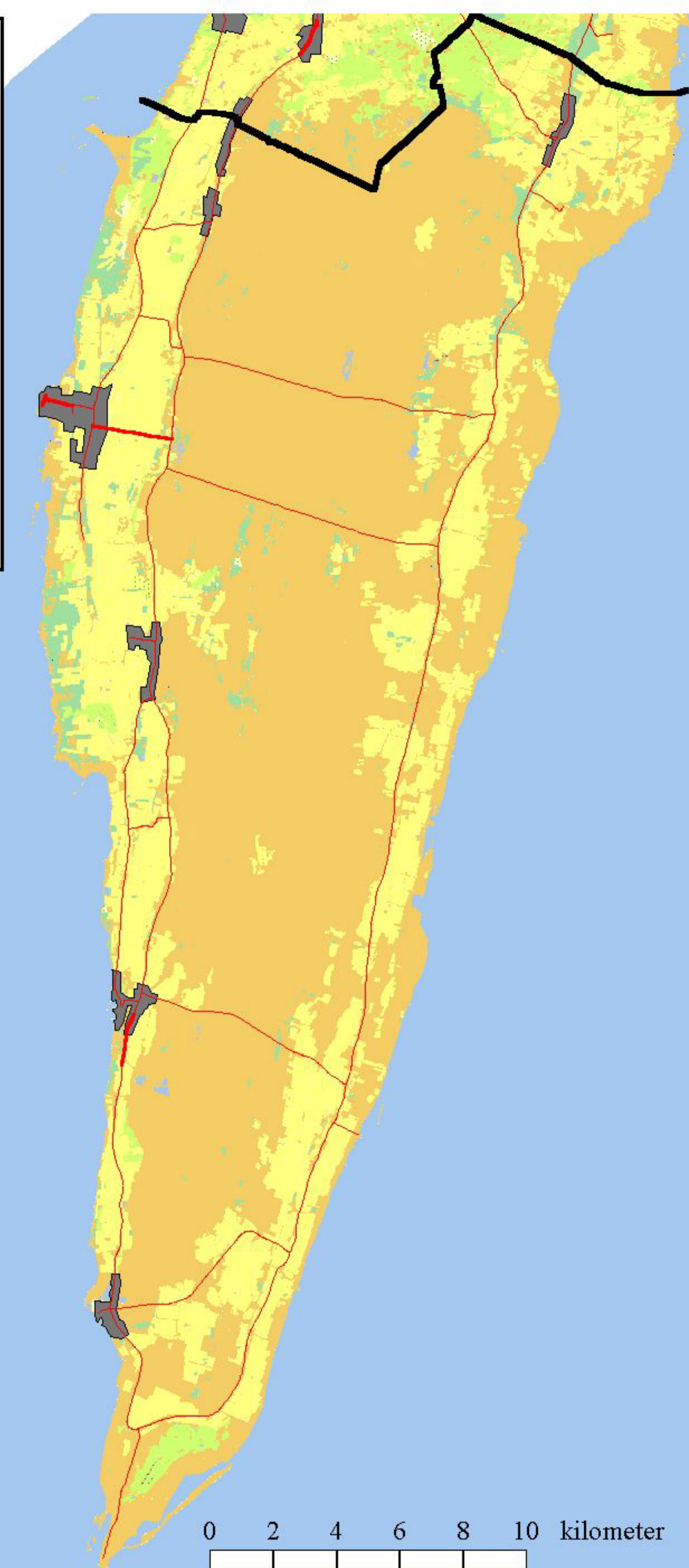
Water



Arable land









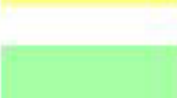
Woodland/forest

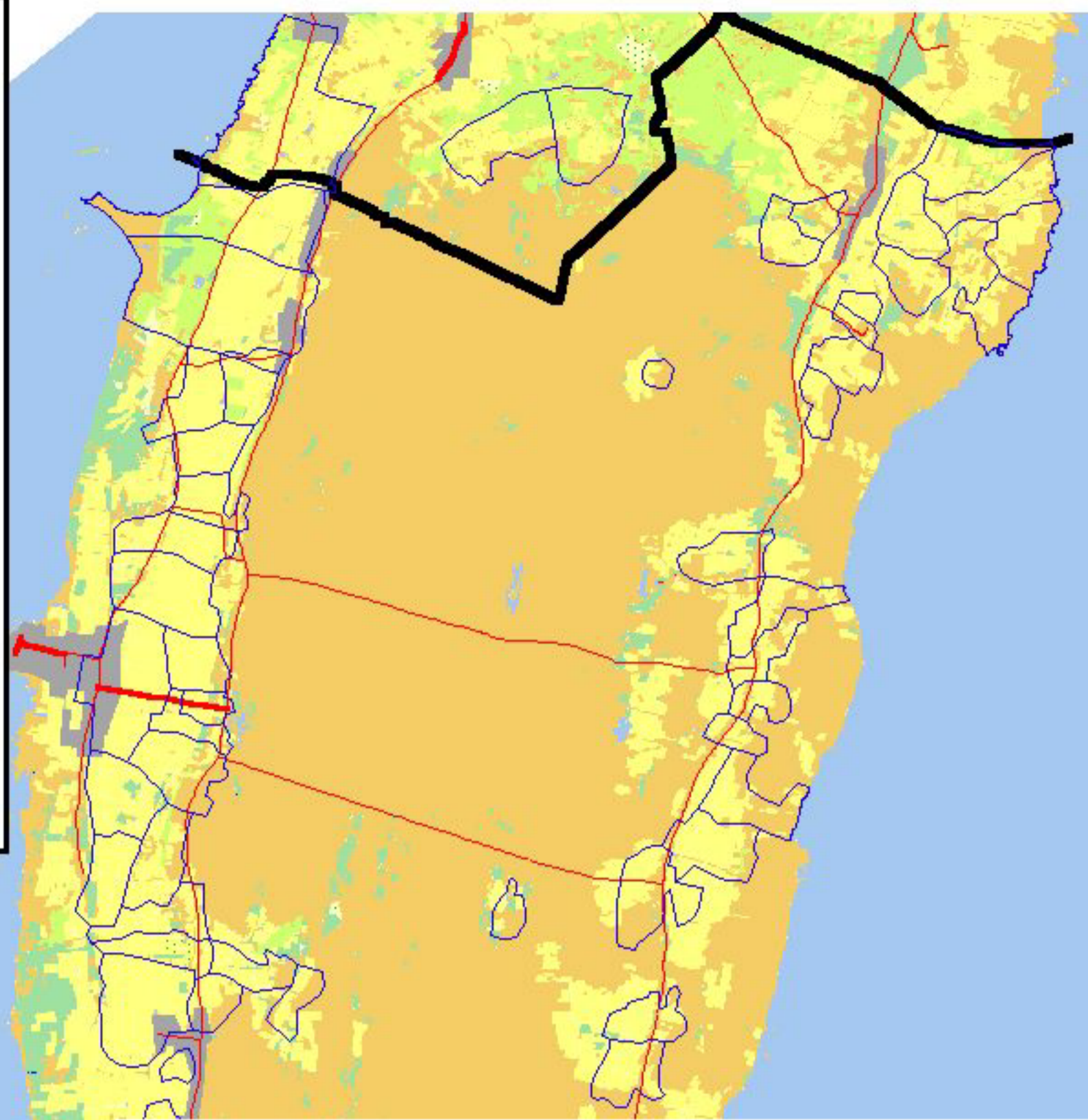


Map C

# Villages of southern Öland in 1683

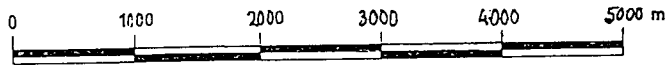
in relation to present-day land use

-  In-fields 1683
-  Property boundary
-  Central locality
-  Grazing land
-  Water
-  Arable land
-  Woodland/forest



# ÖLANDS STORA ALVAR (ÖSA)

Kartan upprättad genom avritning och förminskning av enskiftes-, lagaskiftes- samt utmarksdelningskartor. 1800 - 1850



Borgholm 1991
















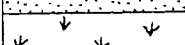
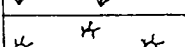
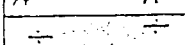
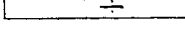






*Ann Moreau*

Ann Moreau

**IKOS**

Institutet för kulturhistoria och samhällsplanering

## LEGEND

	parochial boundary
	enclosure
	road
	settlement
	church
	windmill
	beacon
	gallows hill
	shoreline
	watercourse
	ditch
	expanse of water
	well, spring
	harbour
	tenure boundary
	arable land
	meadowland
	pasture
	wetland
	limestone outcrop
	quarry
	cairn
	(prehistoric) stone enclosure
	prehistoric fort
	name of village

Map E

ÖSSBY









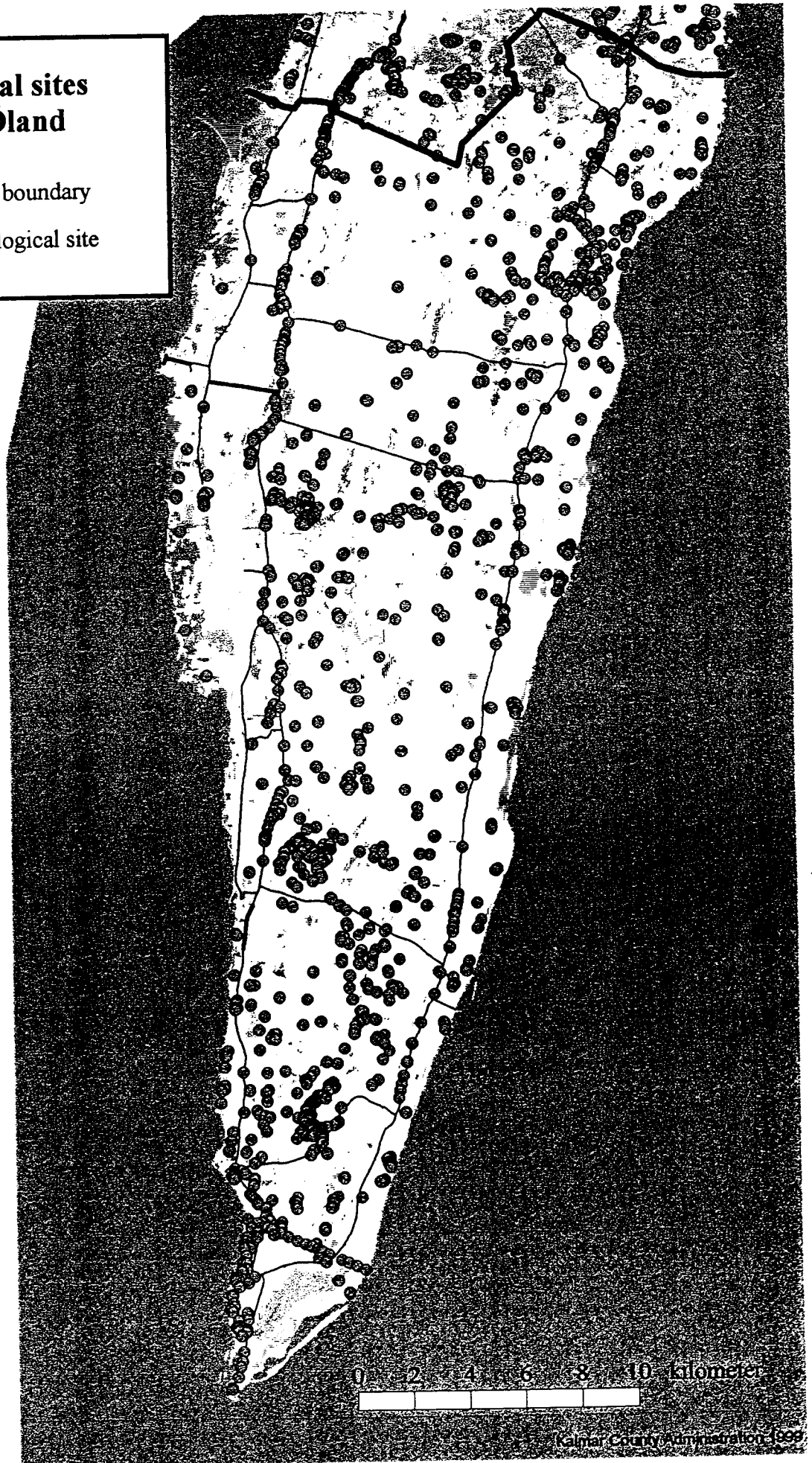
# Archaeological sites of southern Öland



Property boundary



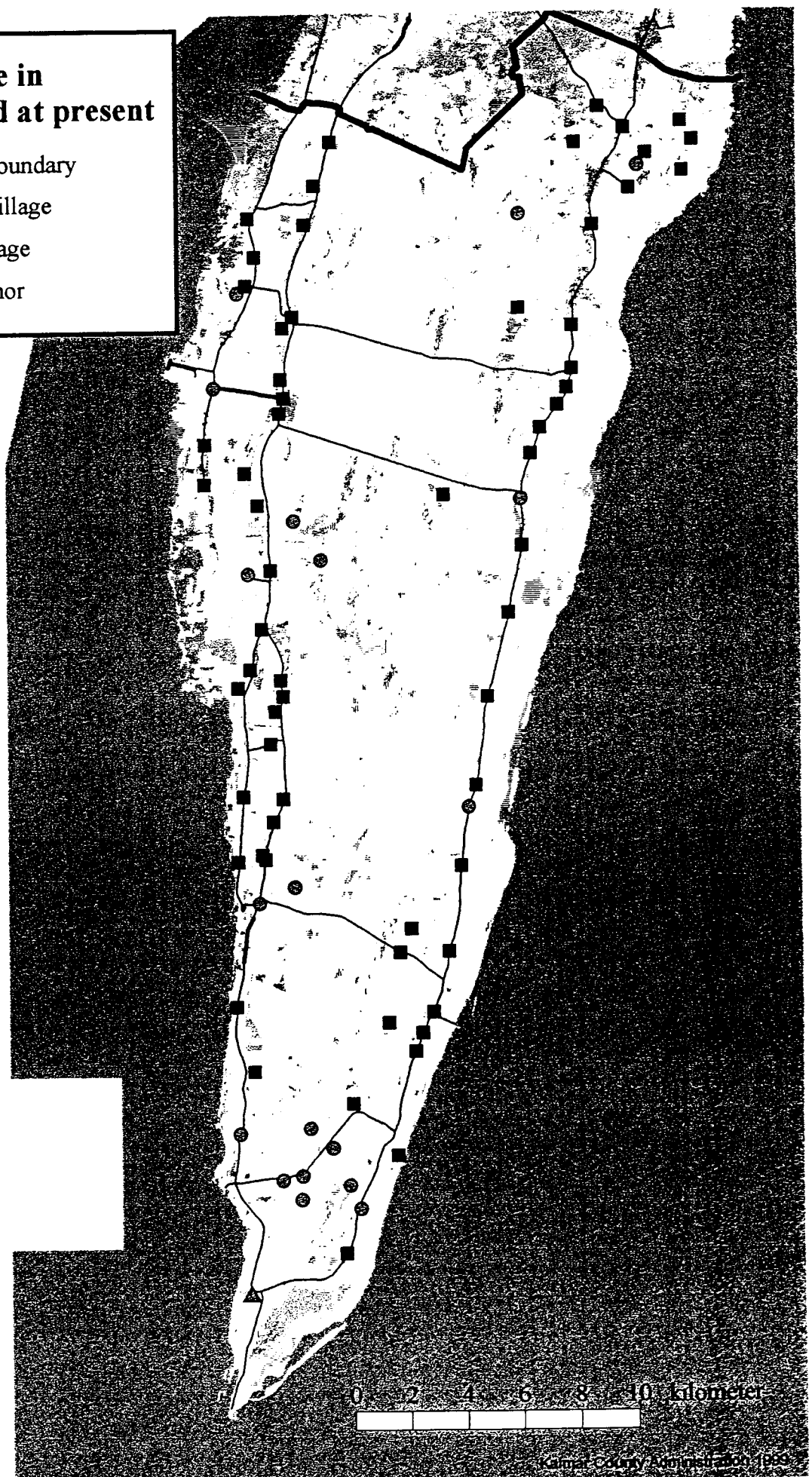
Archaeological site



Map F

# Types of village in southern Öland at present

- Property boundary
- Irregular village
- Linear village
- Royal Manor



Map G

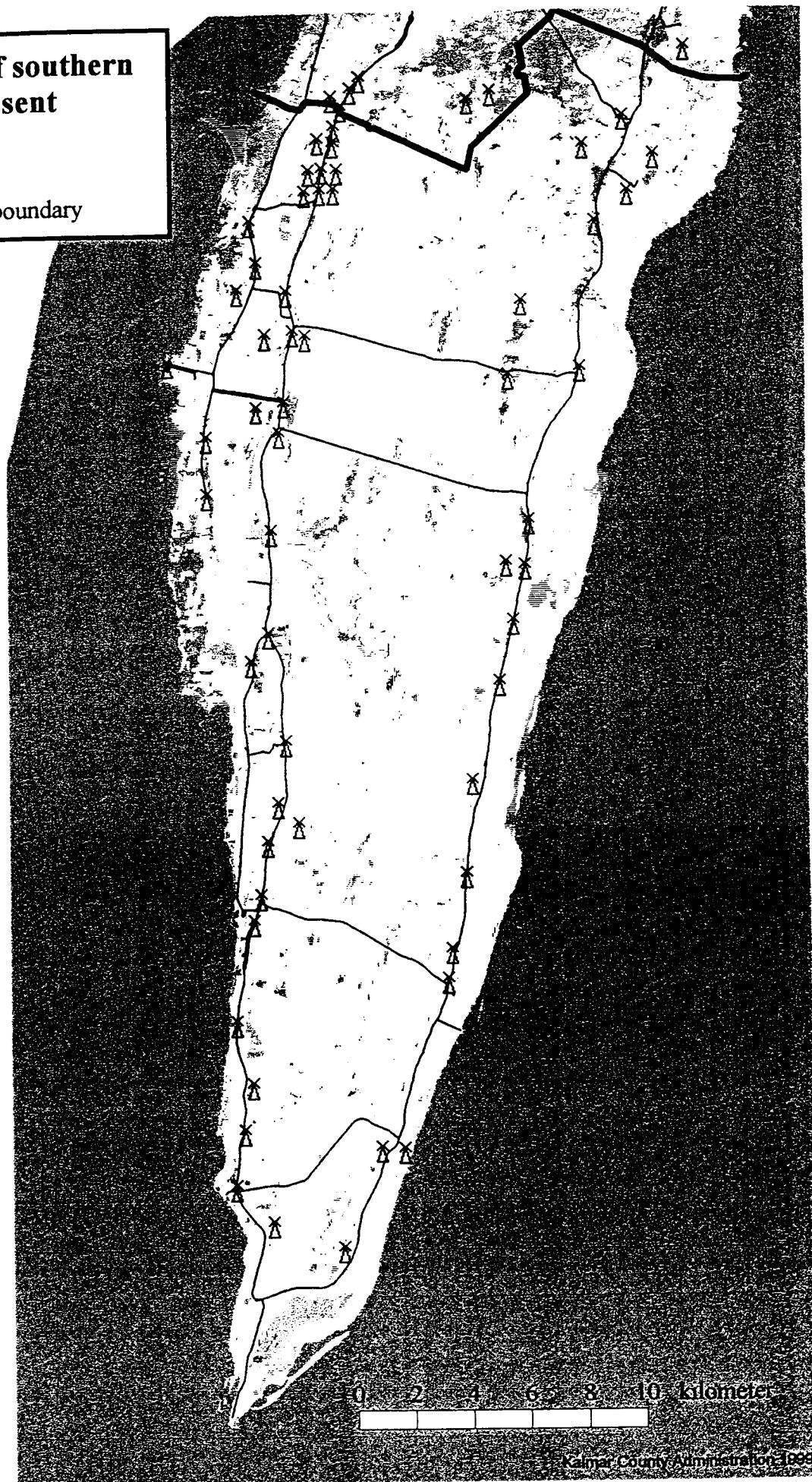
# Windmills of southern Öland at present



Windmill



Property boundary



Map H

# Protected areas of southern Öland at present



Property boundary



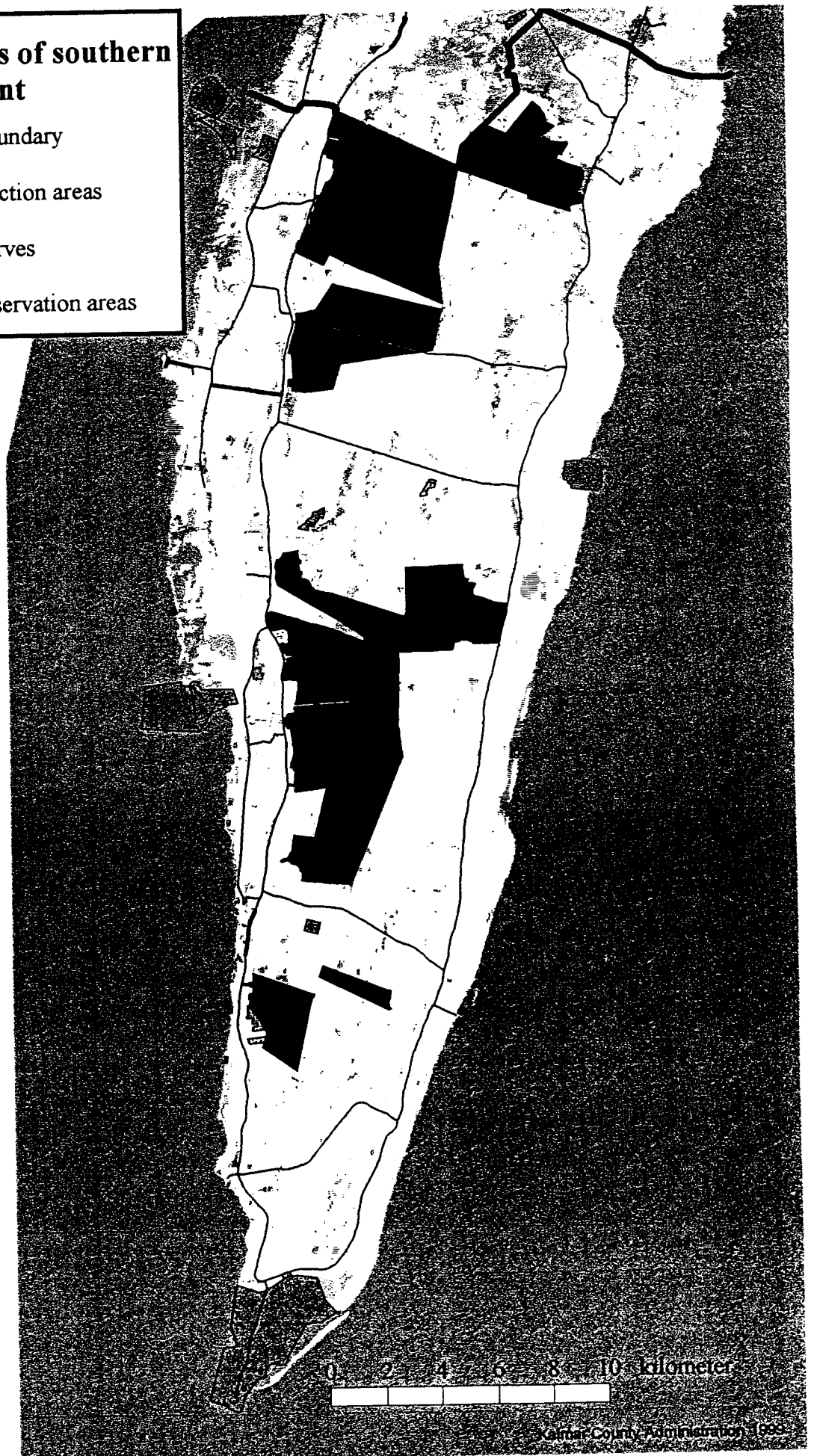
Fauna protection areas



Nature reserves



Nature conservation areas



Map I

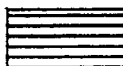
## Places of national interest in southern Öland



Property boundary



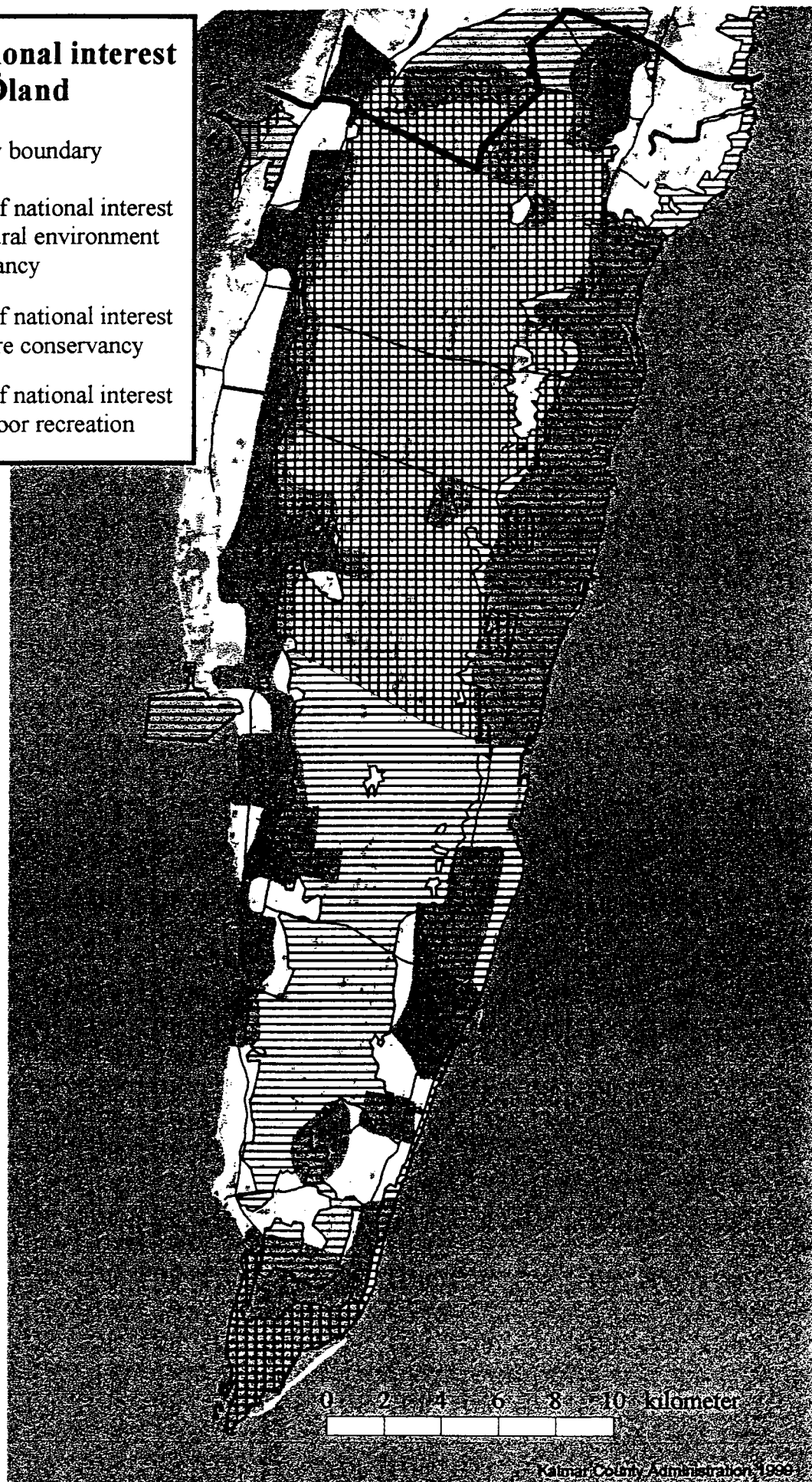
Places of national interest  
for cultural environment  
conservancy



Places of national interest  
for nature conservancy



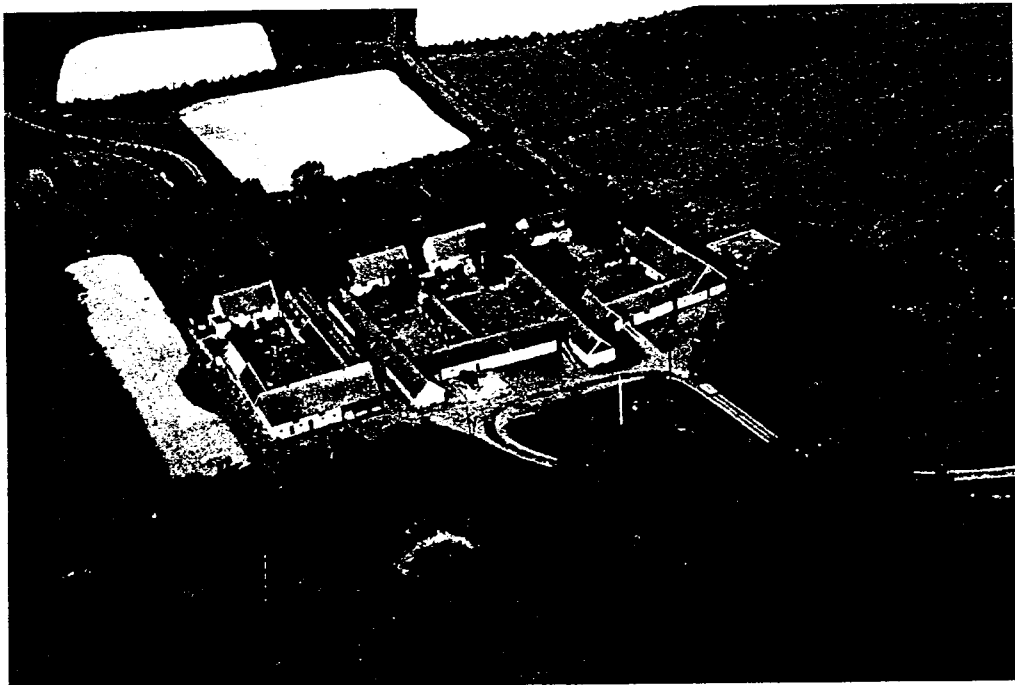
Places of national interest  
for outdoor recreation



Map K



*Photo 1 Gösslunda, Parish of Hulterstad. The village of Gösslunda exemplifies the distinct partition into in-fields and out-fields. The plot and the arable fields – the in-fields – are surrounded by out-fields. Jan Norman, National Heritage Board.*



*Photo 2 Gösslunda, Parish of Hulterstad. The linear village in "lawful location" often straddles the boundary between arable land and pasture. The Geatish homestead, divided into "dwelling yard" and "cattle yard", is a typical feature of these villages. Jan Norman, National Heritage Board.*

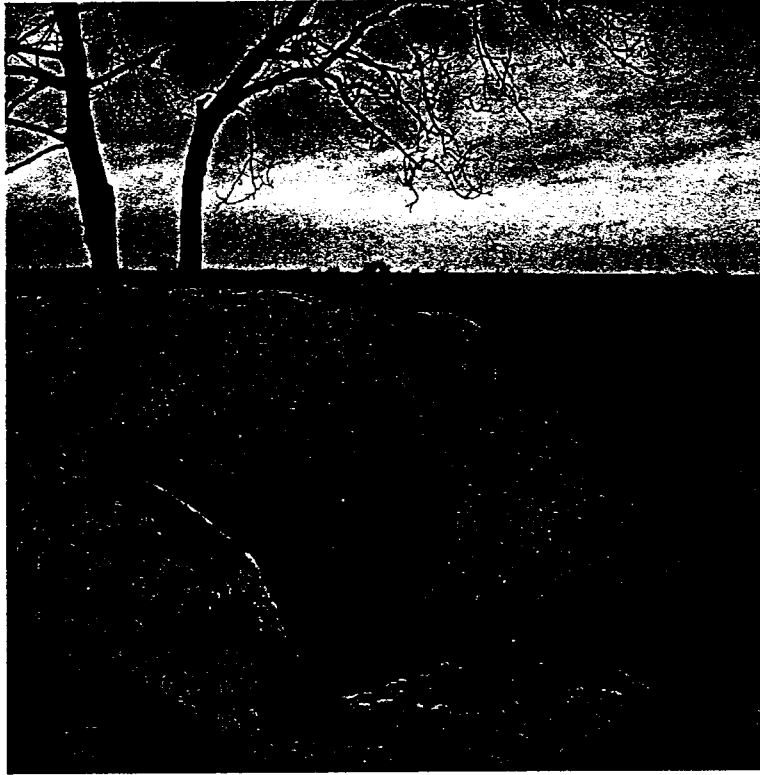


*Photo 3 Hulterstad, Parish of Hulterstad. The church, the village and the arable land bordering on the grazed coastlands, have been constant since medieval times. Jan Norman, National Heritage Board.*

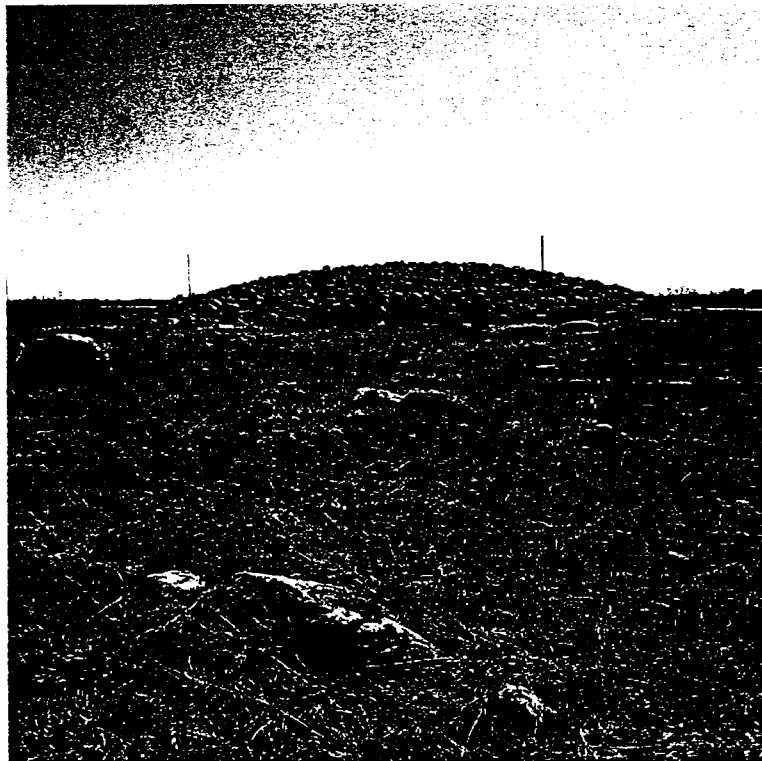


*Photo 4 Getlinge burial ground, Parish of Södra (South) Möckleby. The big village burial grounds were sited on the crest of the Landborg, where the roads also went. Jan Norman, National Heritage Board.*





*Photo 5* Parish of Resmo. The passage graves along the western Landborg testify to human settlement already in the Agrarian Stone Age. Anders Johansson.



*Photo 6* Gösslunda, Parish of Hultestad. Gösslunda Rör is a monumental Bronze Age cairn which, together with other large cairns, indicates territorial definitions. Anders Johansson.



*Photo 7* Parish of Hulterstad. The history of Hulterstad's parish church goes back to the 12th century. Anders Johansson.



*Photo 8* The windmills of Öland came into being during the 18th and 19th centuries, with the expansion of cereal farming. Ingemar Karlsson.



*Photo 9 Today's farmers work the same land as their medieval predecessors, but with modern methods and implements. Ingemar Karlsson.*



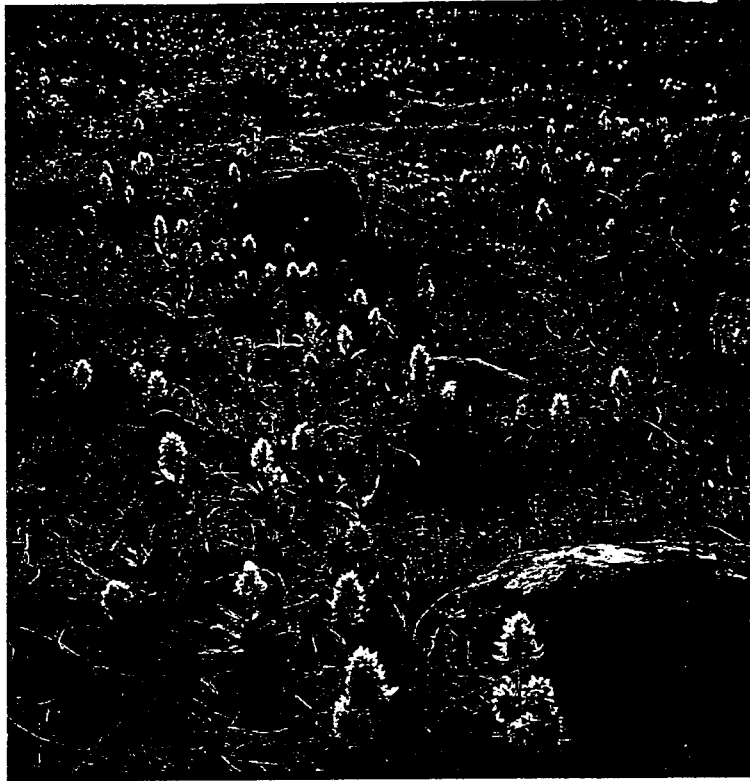
*Photo 10 The thin alvar soils have been open ever since the ice cap retreated more than 10,000 years ago. Many rare flora and fauna species have their habitats here, e.g. the endemic Öland rockrose, *Helianthemum oelandicum*. Ingemar Karlsson.*



*Photo 11* Segerstad, Parish of Segerstad. The coastlands and coastal meadows of Eastern Öland are polyspecific, thanks to continuous grazing. These lands have never been artificially manured. Characteristic plants of this environment include thrift. *Ameria maritima*. Ingemar Karlsson.



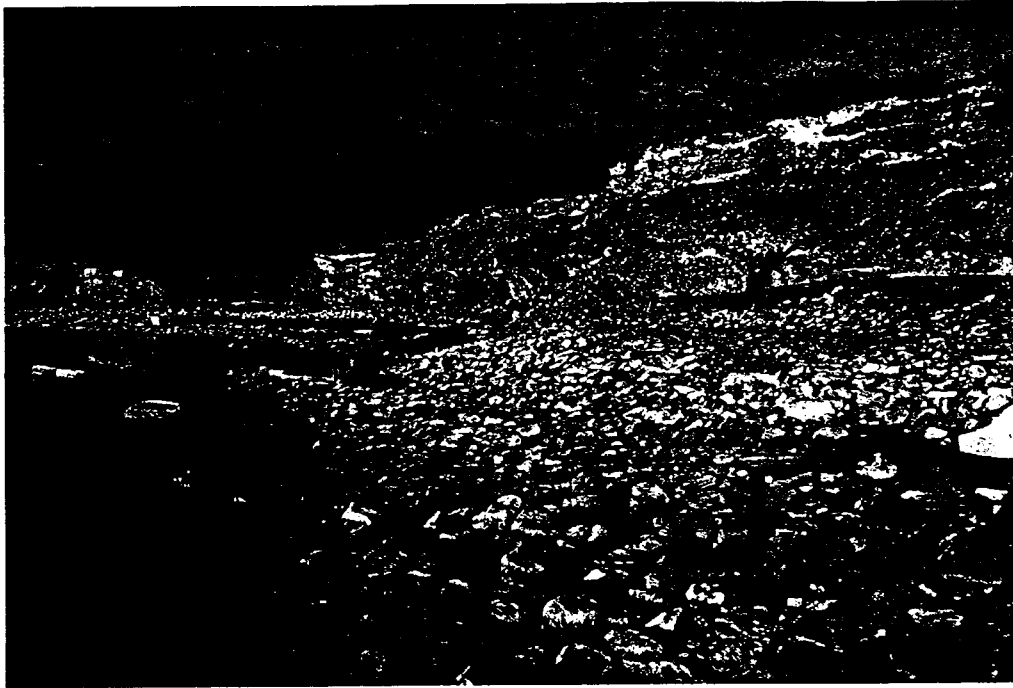
*Photo 12* Grazing livestock are a vital factor of the openness and high biodiversity of the landscape. Anders Johansson.



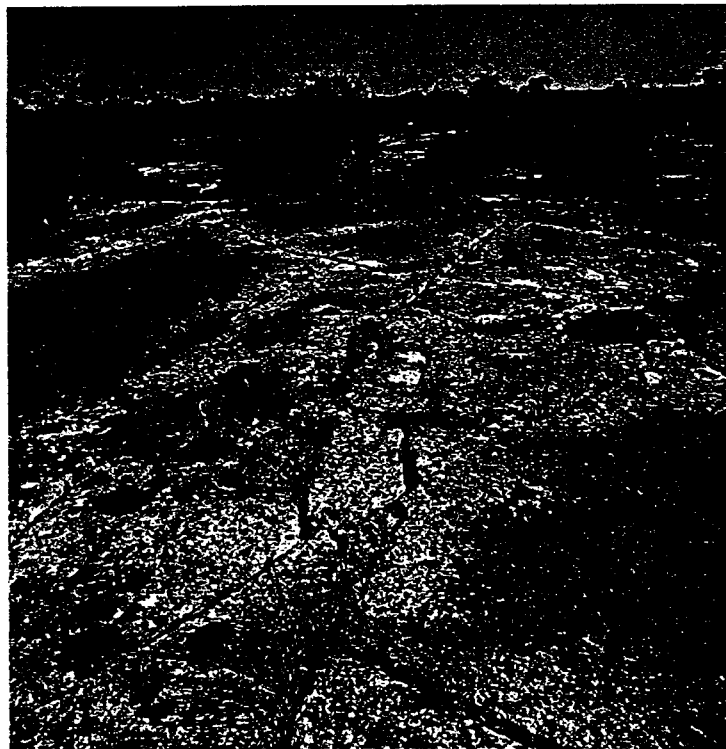
*Photo 13* The calcareous soil is a sine qua non for many orchid species, e.g. the elder-flowered orchid, *Dactylorhiza sambucina*, which flowers abundantly in spring, Anders Johansson.



*Photo 14* Barnacle geese (*Branta leucopsis*) rest in large numbers along the coastlands of Eastern Öland during spring and autumn. The species nests mainly in the Arctic, but also on Öland and Gotland. Tommie Skoog.



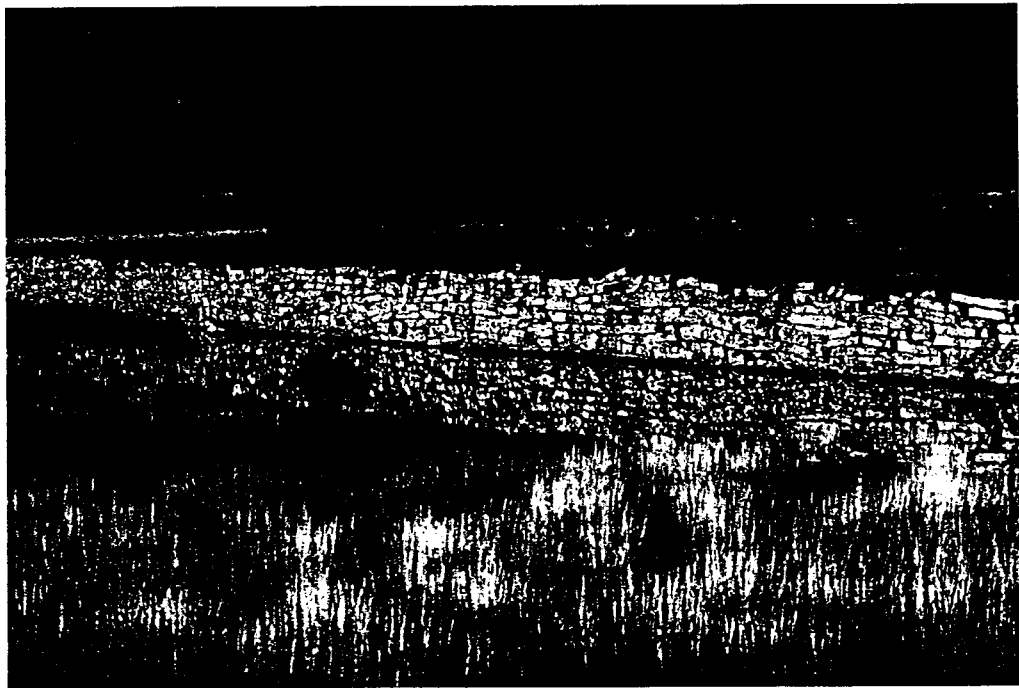
*Photo 15* The bedrock of Öland consists of sedimentary rocks formed during the Cambrian and Ordovician periods, between 570 and 440 million years ago. Clay shale strata are exposed along the Western Landborg. Ingemar Karlsson.



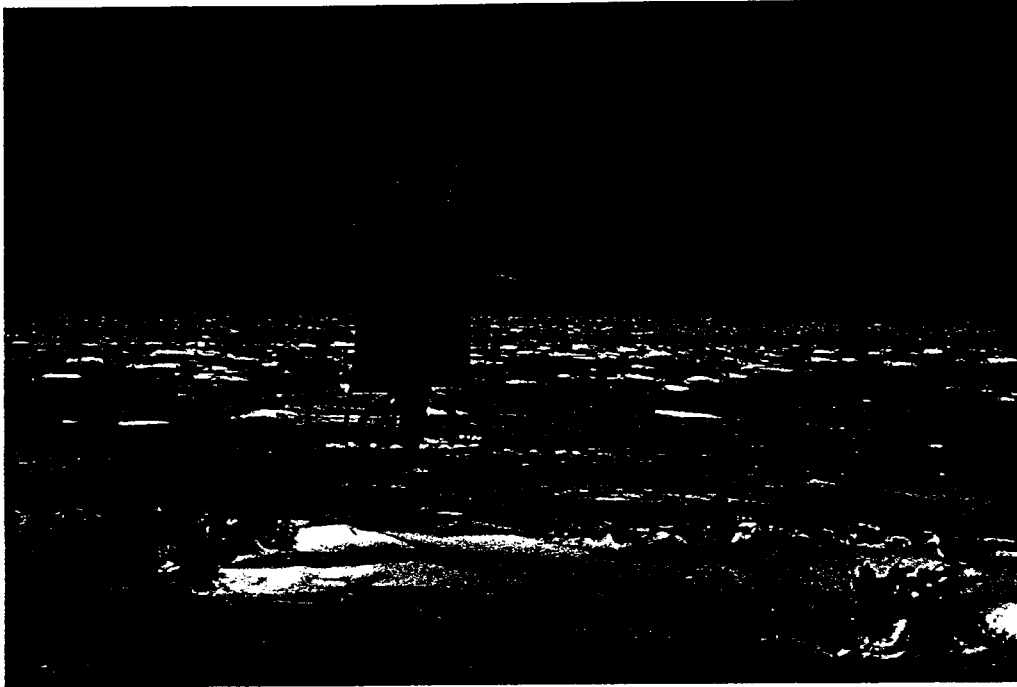
*Photo 16* Karsts are formed in limestone areas where underground drainage undermines the bedrock, resulting among other things in the formation of wide fissures. The paler sections surrounding the fissures are due to snails grazing the algae in the crustose lichens.



*Photo 17 During extremely dry periods, a great deal of the vegetation can wither away. Eje Rosén.*



*Photo 18 Heavy precipitation, especially in the spring and autumn, can cause flooding on the thin soils of the alvar. Ingemar Karlsson.*



*Photo 19 Winter in Öland can be bitterly cold, in spite of the maritime climate, Ingemar Karlsson.*



*Photo 20 Fåk is the name for a severe blizzard descending on Öland at regular intervals. Due to the flatness of the terrain, large quantities of snow accumulate in sheltered spots. Ingemar Karlsson.*





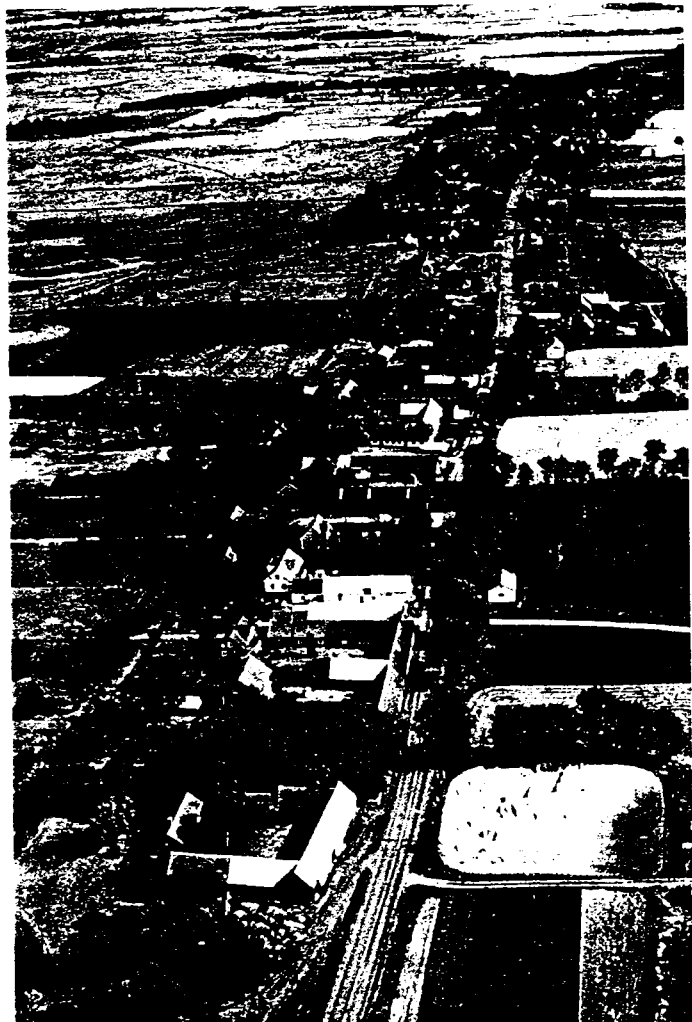
*Photo 21 Frösslunda, Parish of Hulterstad. The old distinction between in-fields and out-fields, which is of medieval origin, still exists today and is clearly discernible in the landscape. Jan Norman, National Heritage Board.*



*Photo 22 The most fertile soil is in the Mörbylånga Valley on the western side. The sheer face of the Landborg sharply segregates the poor grazing lands to the east. Bårby prehistoric fort is in the centre of the picture. Jan Norman, National Heritage Board.*



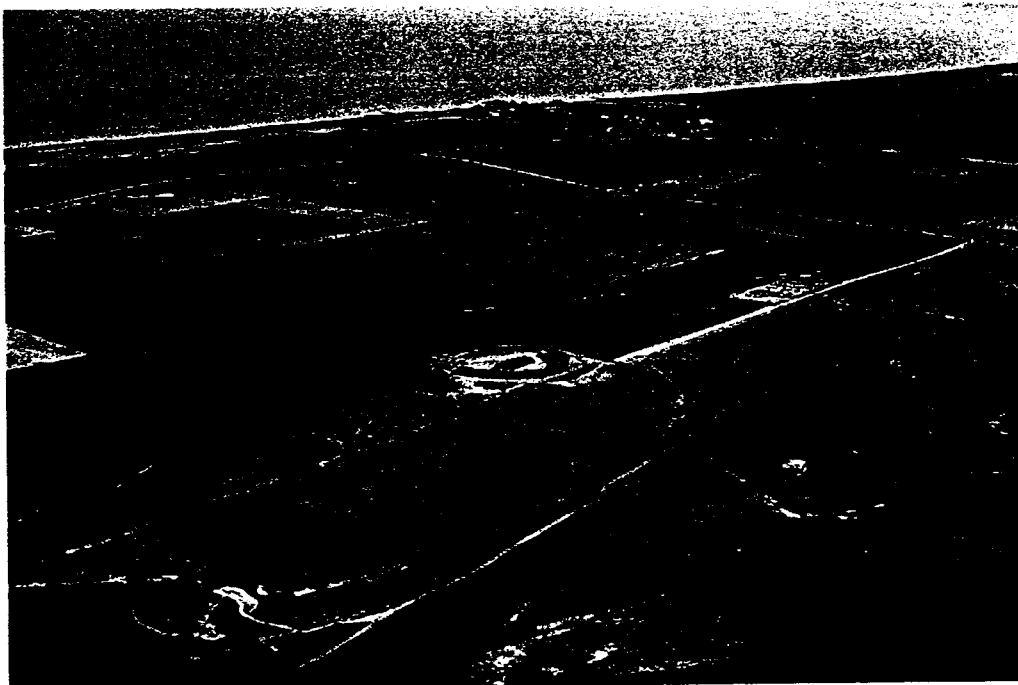
*Photo 23 Näsby, Parish of Ås. The cultivated land in Näsby is located to the east of the village, with Stora Alvaret to the west. Jan Norman, National Heritage Board.*



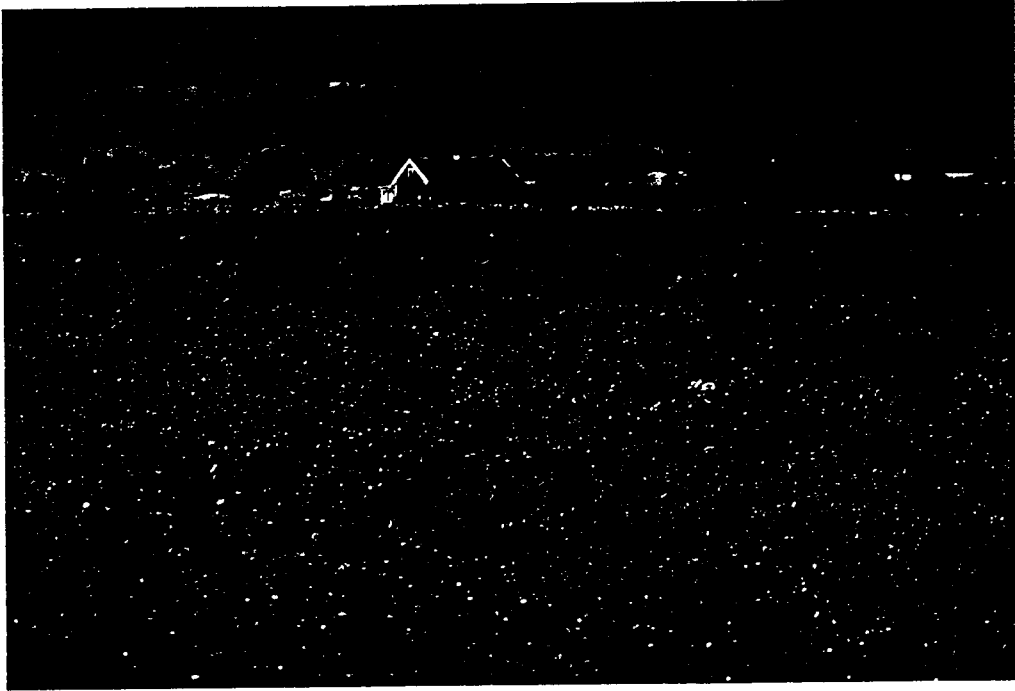
*Photo 24 Södra (South) Kvinneby, Parish of Stenåsa. The farmsteads and villages huddle close together, and many of the farmsteads are still enclosed by buildings. Jan Norman, National Heritage Board.*



*Photo 25 Stenåsa, Parish of Stenåsa. Stenåsa Church Village is one example of the location of the linear village. Ever since medieval times, this village has lined the highway along the Ancylus Ridge. Jan Norman, National Heritage Board.*



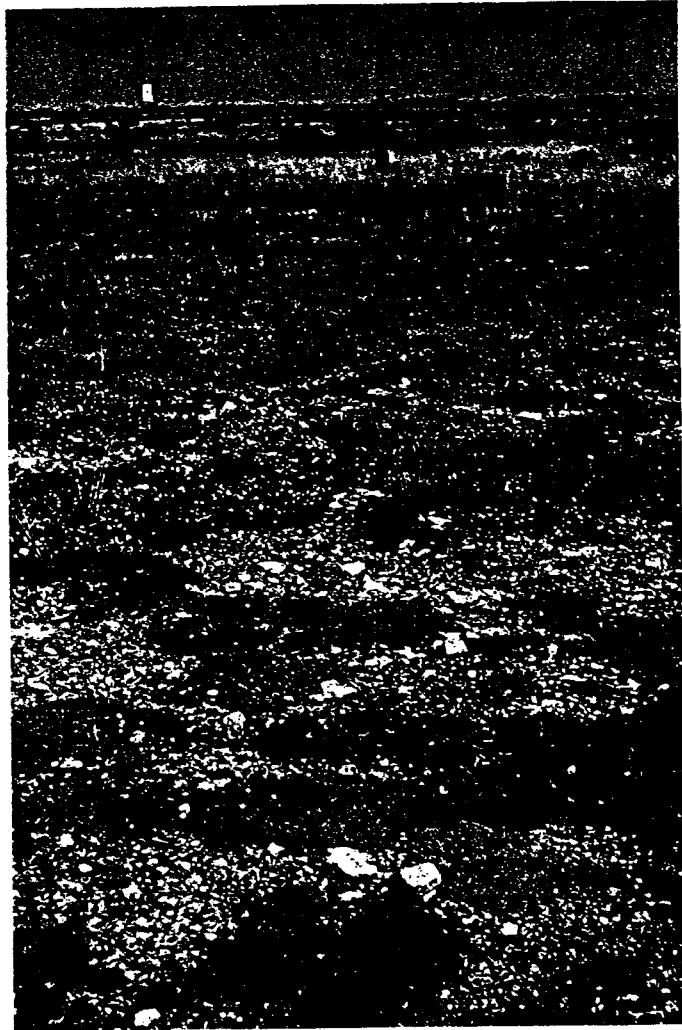
*Photo 26 The cultivated land forms a narrow strip between the alvar and the coastland. Jan Norman, National Heritage Board.*



*Photo 27 Öland is something of a refuge for weeds and includes many of the species which are severely endangered in the Nordic area. Commoner weeds can also occur in very large numbers, e.g. cornflower (*Centaurea cyranus*) and poppy (*Papaver* ssp.), pictured. Ingemar Karlsson.*



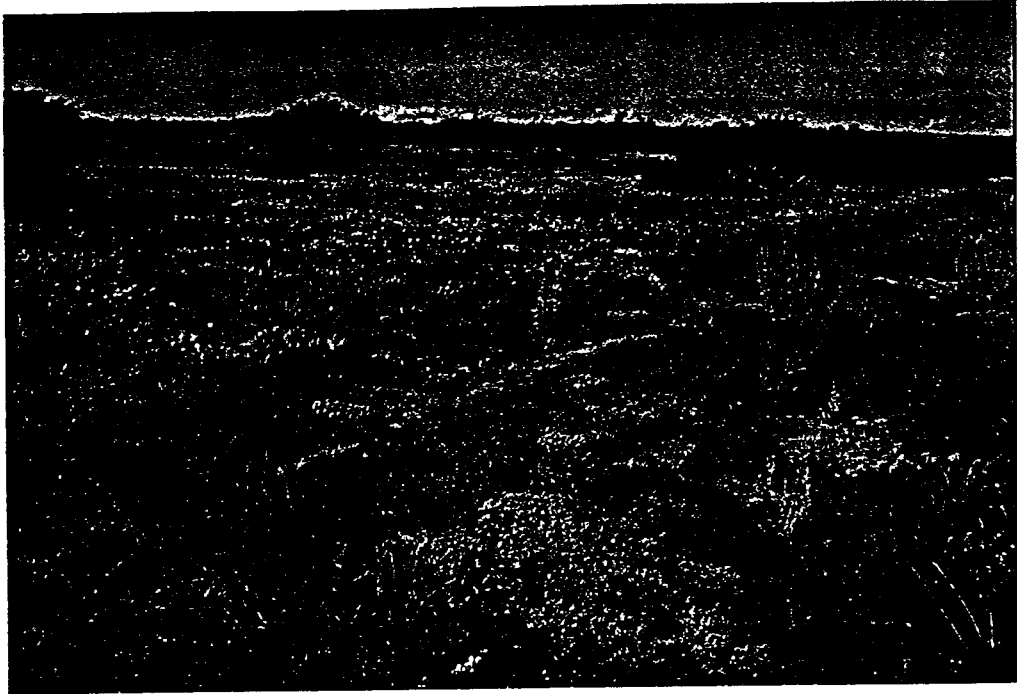
*Photo 28 Öland's roadside vegetation is often magnificent, here with a predominance of chicory (*Cichorium intybus*). Helena Lager.*



*Photo 29* Vegetation is sparse on the thin alvar soils. Due to powerful frost movements in the soil during winter, plants need strong roots in order to survive. Ingemar Karlsson.



*Photo 30* The Iron Age graves on Stora Alvaret are flat stone-settings. Ingemar Karlsson.



*Photo 31 The ancient roads across Stora Alvaret are sometimes visible as holloways. Ingemar Karlsson.*



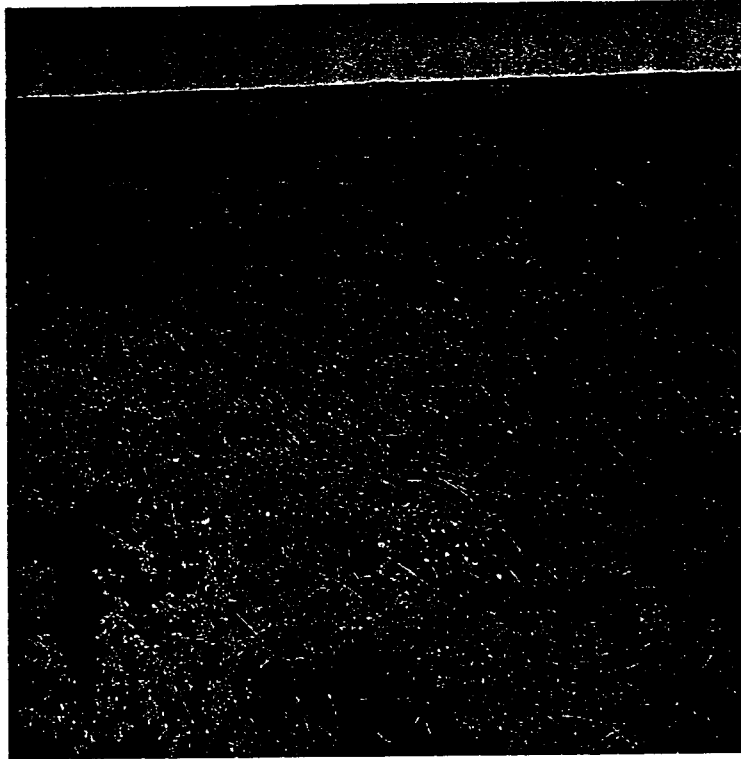
*Photo 32 Ruins of shepherds' huts are a common archaeological phenomenon on Stora Alvaret. Ingemar Karlsson.*



*Photo 33 Cairns have been construed as early boundary marking. Ann Moreau.*



*Photo 34 Slightly deeper till soils include the polyspecific alvar dry grasslands, the openness of which is greatly dependent on grazing. Pictured are the orchid species elder-flowered orchid (*Dactylothiza sambucina*), in the foreground, and, in the background, early purple orchid (*Orchis mascula*). Ingemar Karlsson.*

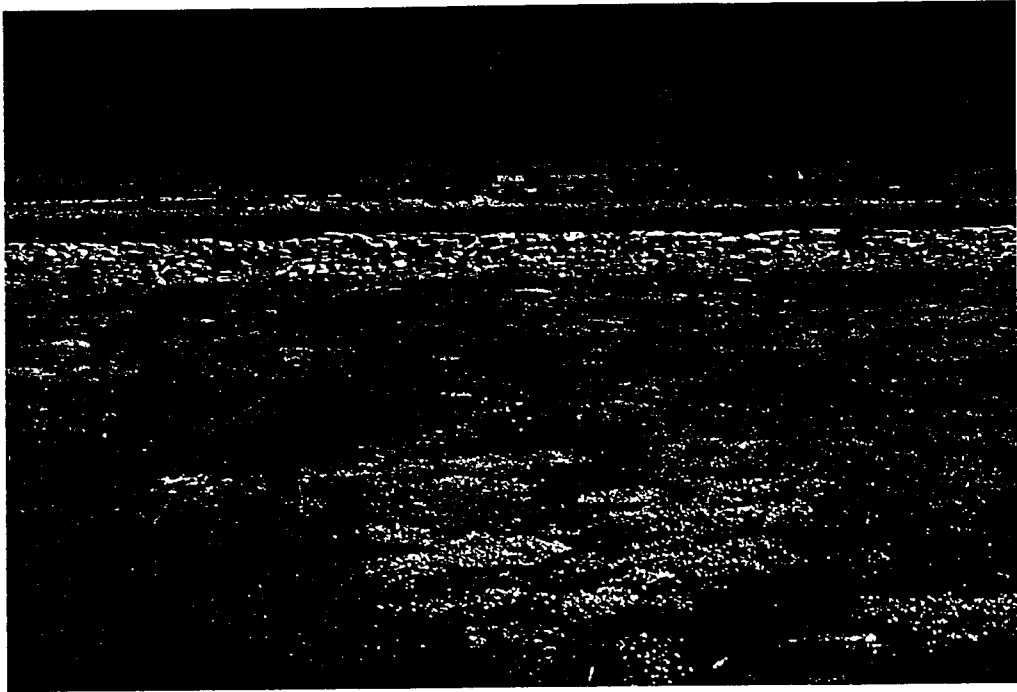


*Photo 35 The calcareous moist grasslands are dependent on grazing and occur in declivities on the alvar. Eje Rosén.*

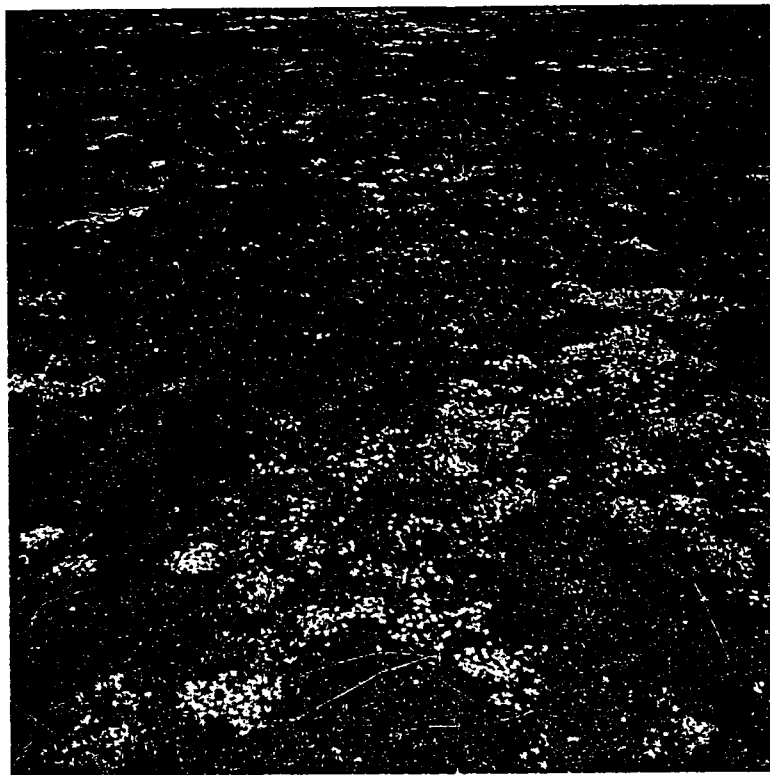


*Photo 36 The sheep's fescue alvar type occurs in environments with thin and calcareous residual deposits. This vegetation type is exposed to heavy frost movements and occasional inundations. Eje Rosén.*

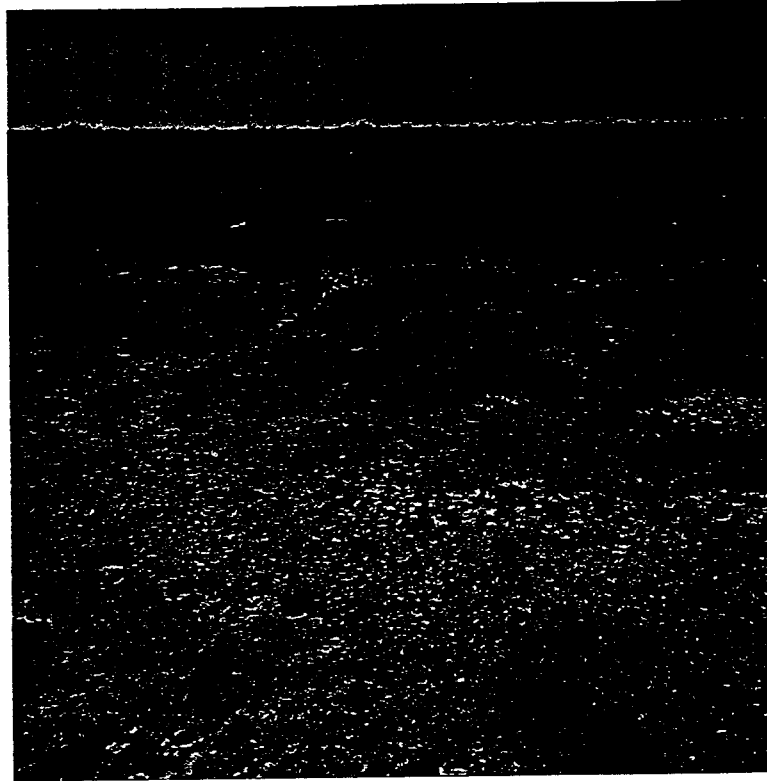




*Photo 37 The vegetation communities of the alvar often form a fine-scaled mosaic. Ingemar Karlsson.*



*Photo 38 Limestone bedrock alvar with stonecrop species, Sedum acre and S. album. Anders Johansson.*



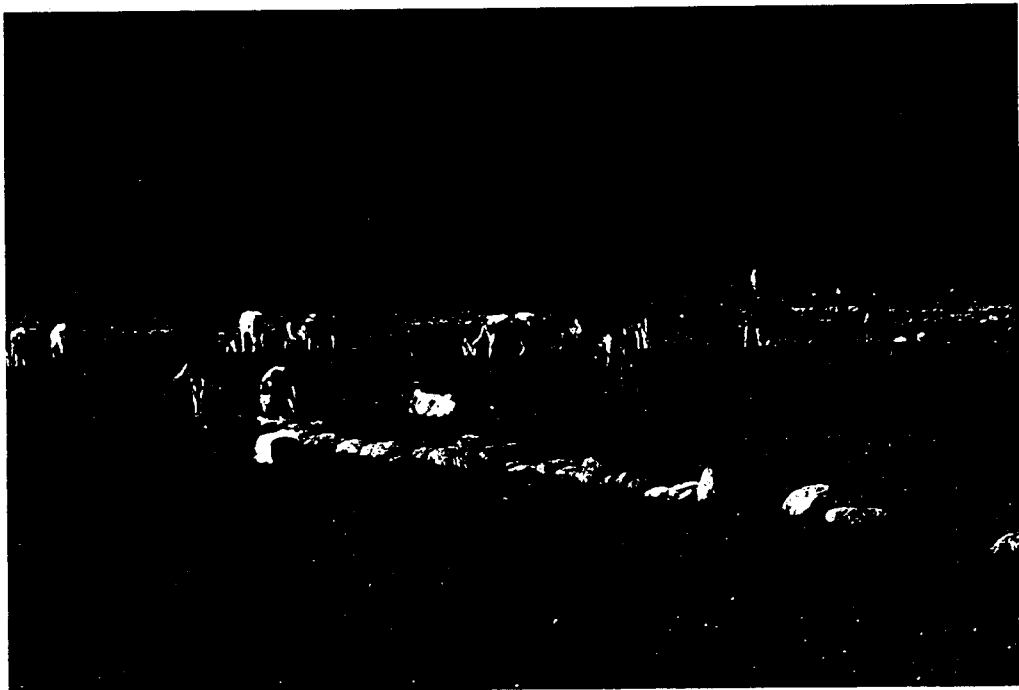
*Photo 39* Alvar temporary pools are waterlogged declivities which dry out in summer. The vegetation is sparse and distinctive, including for example the plantain *Plantago tenuiflora*. Anders Johansson.



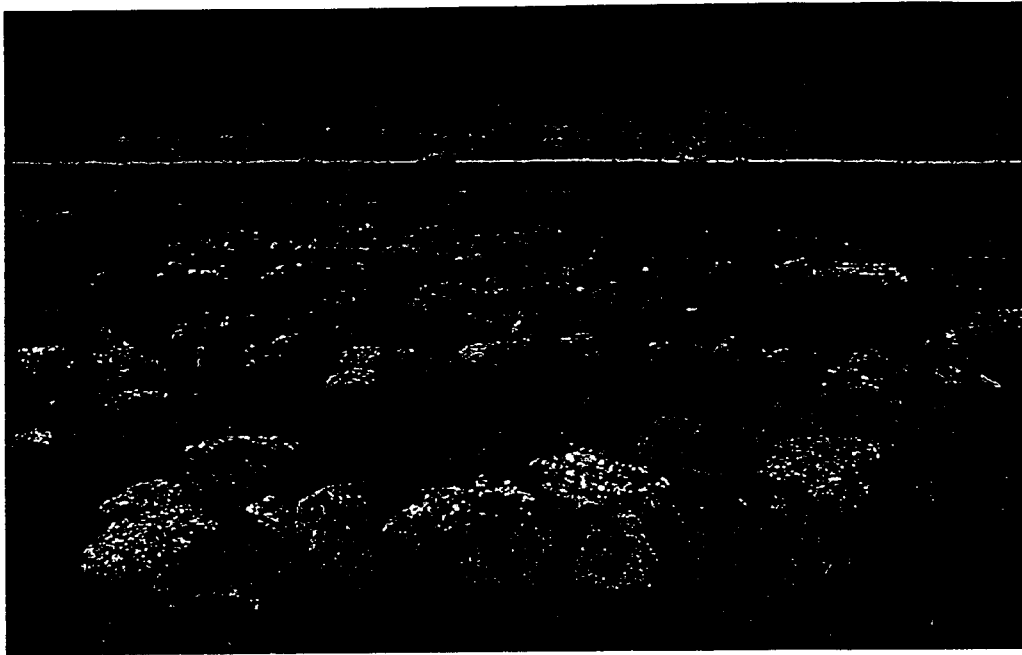
*Photo 40* In larger depressions which are capable of retaining water all the year round, alvar lakes form which are seldom more than a metre in depth. Several wader and duck species can nest near these lakes if the land is sufficiently grazed. Eje Rosén.



*Photo 41 The eastern coastlands have numerous archaeological remains, such as house foundations, stone-walled enclosures and burials. A number of graves are visible at the bottom of this picture. Jan Norman, National Heritage Board.*



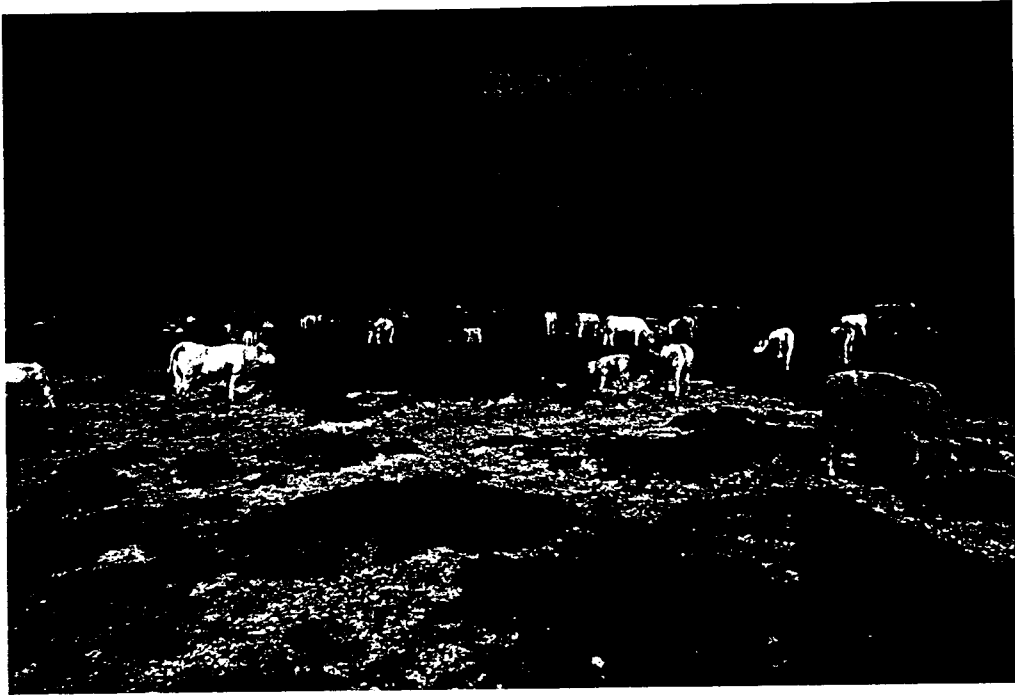
*Photo 42 Grazing livestock keep the landscape open and the ancient stone-walled enclosure free from vegetation. Ingemar Karlsson.*



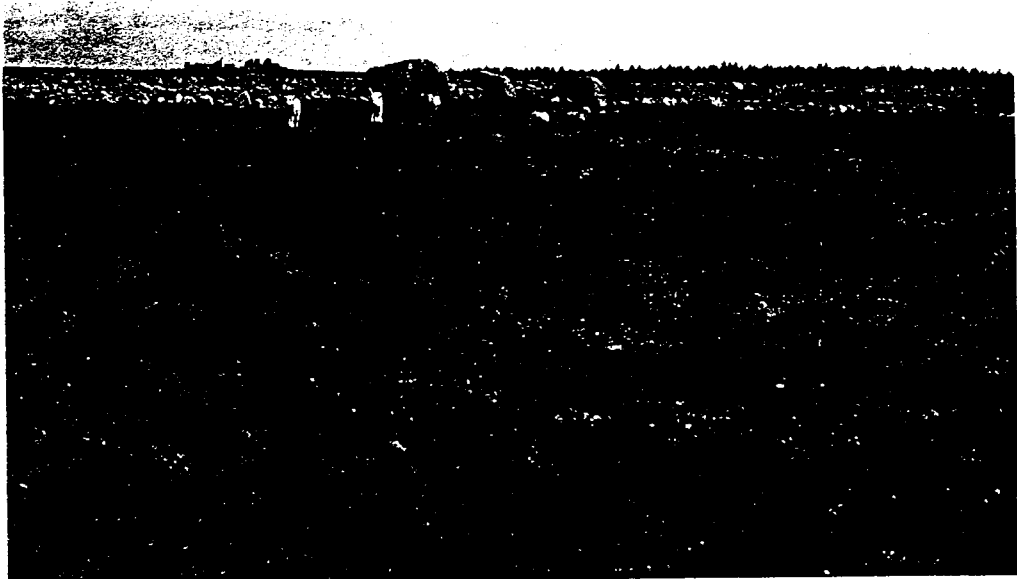
*Photo 43 "Champions' graves" are Early Iron Age house foundations. Thorsten Jansson.*



*Photo 44 The vegetation communities of the coastlands depend on continuous grazing for their survival. Certain coastlands include elements of thin soils with alvar vegetation. Ingemar Karlsson.*



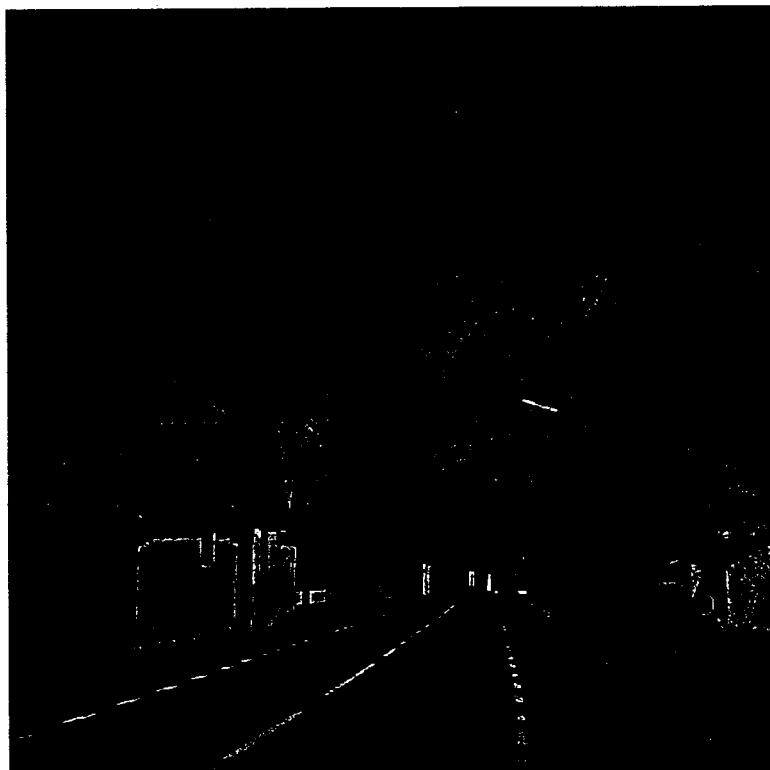
*Photo 45 Skonor are coastland areas with little vegetation, formed by erosion, bunches of seaweed and animal hoofprints. Only plants which are highly salt-resistant can survive in these conditions. Ingemar Karlsson.*



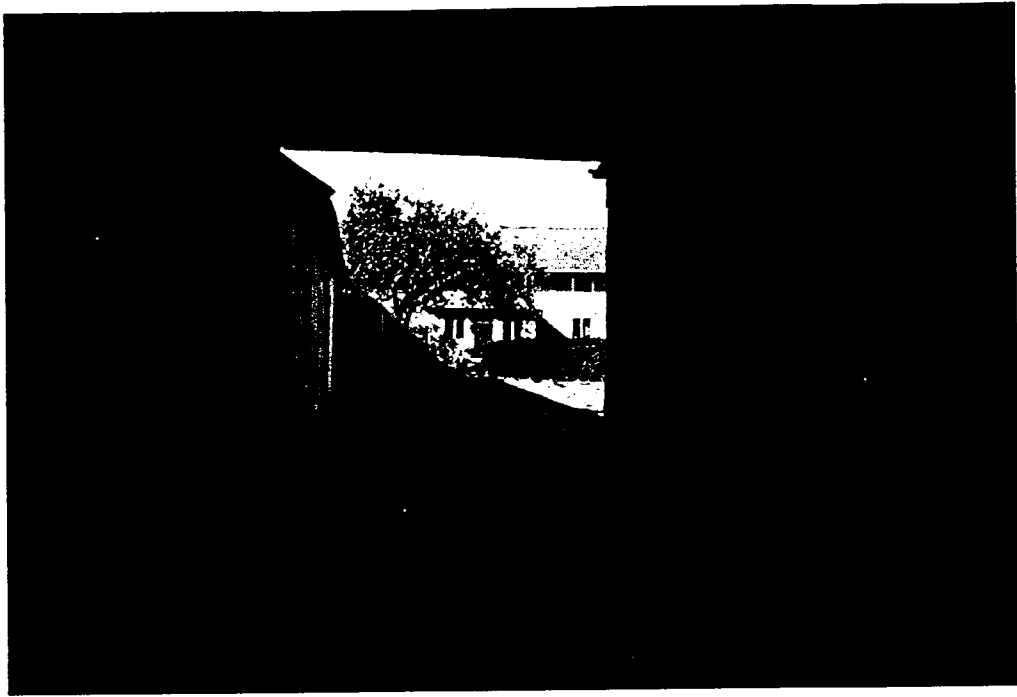
*Photo 46 In well-grazed coastlands, yellow ant colonies are often visible as tufts on the ground. Ingemar Karlsson.*



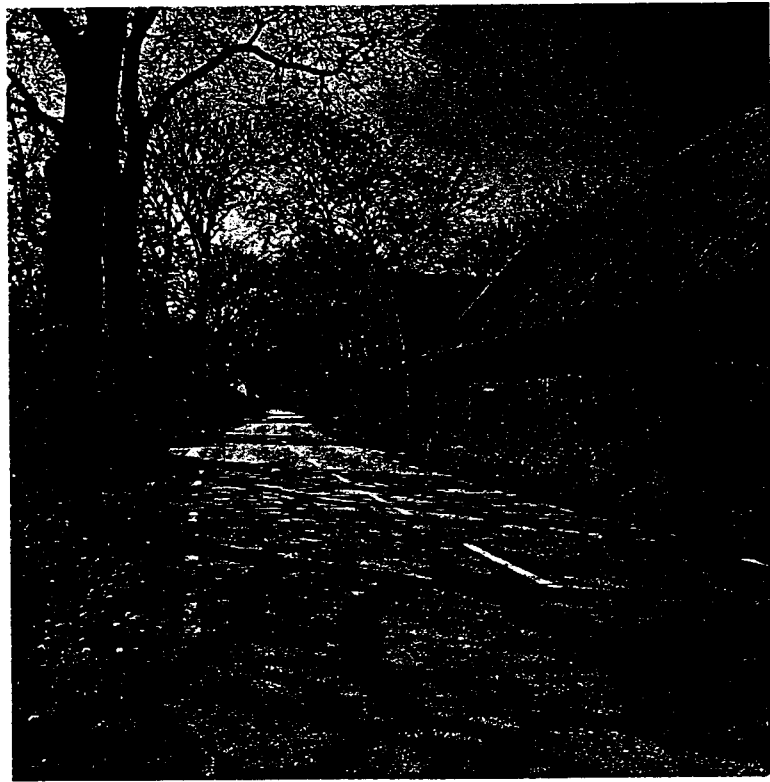
*Photo 47 The farmhouses, fronting the highway, often have brightly painted weatherboarding.*  
Ingemar Karlsson.



*Photo 48 The outbuildings can form continuous, impenetrable frontages along the highway.*  
Anders Johansson.



*Photo 49 The Geatish farmstead has a "man yard" and a "cattle yard", separated by a wall or fence. Eje Rosén.*



*Photo 50 Limestone has always been an important building material in Öland. Anders Johansson.*



*Photo 51 Limestone, easily extracted and near at hand, was used for both buildings and fittings – here as stall partitions. Anders Johansson.*

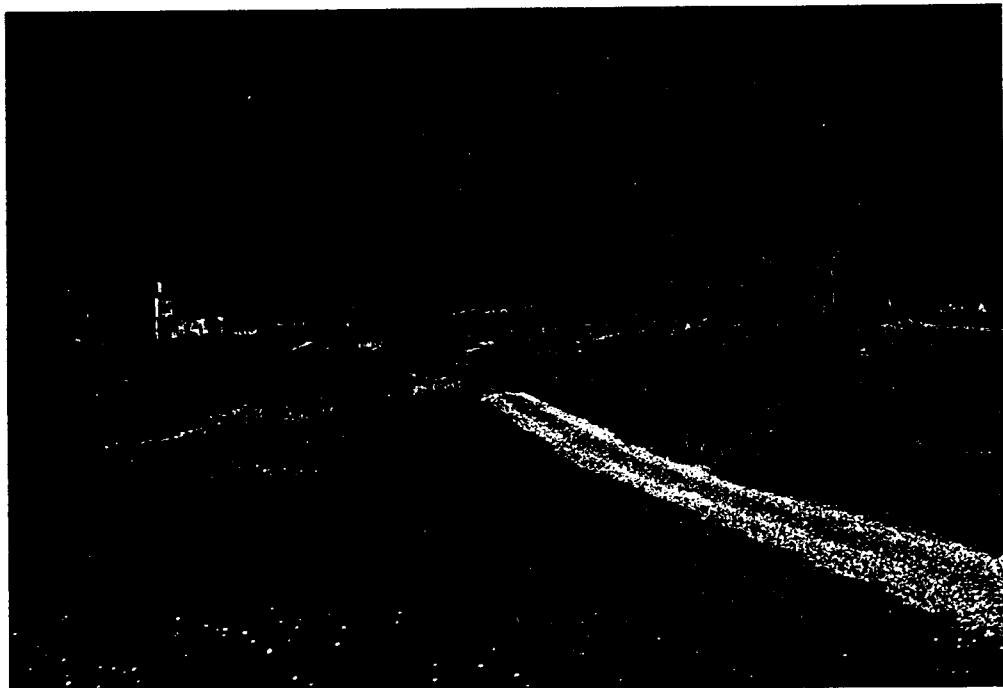


*Photo 52 A "cattle yard" paved with Öland limestone. Ingemar Karlsson.*





*Photo 53 Bole-house and crown-post structures represent ancient building techniques which remained in use until recently. Anders Johansson.*



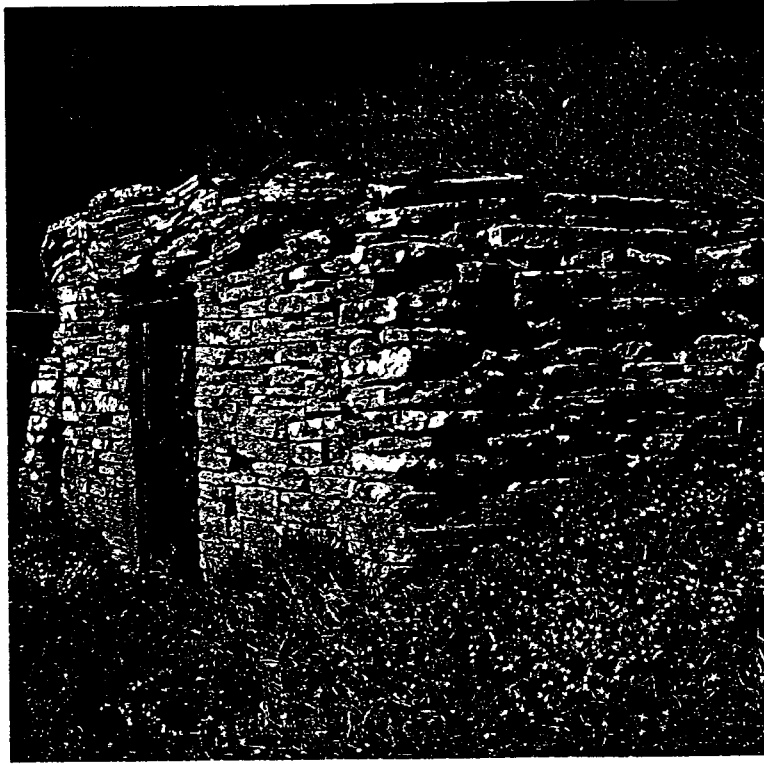
*Photo 54 Parish of Resmo. The windmills are just outside the village, often high up along the edge of the Landborg, in wind-swept positions. Ingemar Karlsson.*



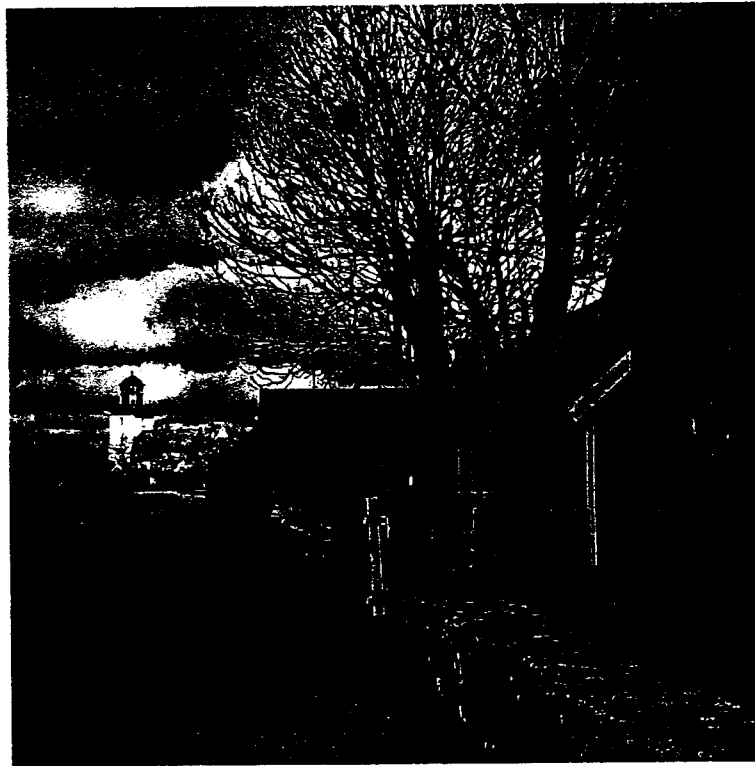
*Photo 55 Fishing waters formed part of the village, and sheds for storing tackle etc. were built on the "boathouse flat" which the villagers held in common. Ingemar Karlsson.*



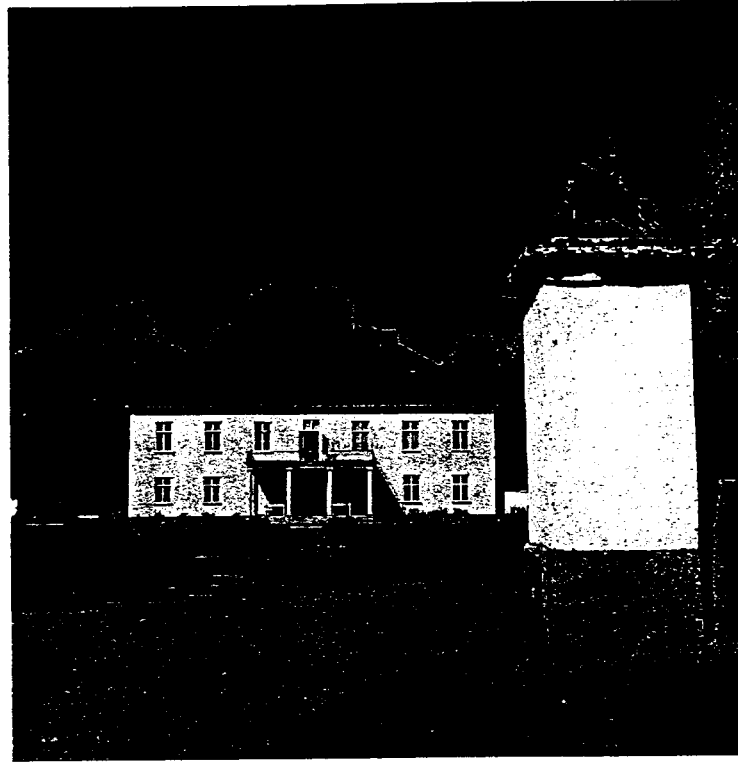
*Photo 56 The eel traps ("eel yards") of the eastern coast are relics of fishery installations. Ingemar Karlsson.*



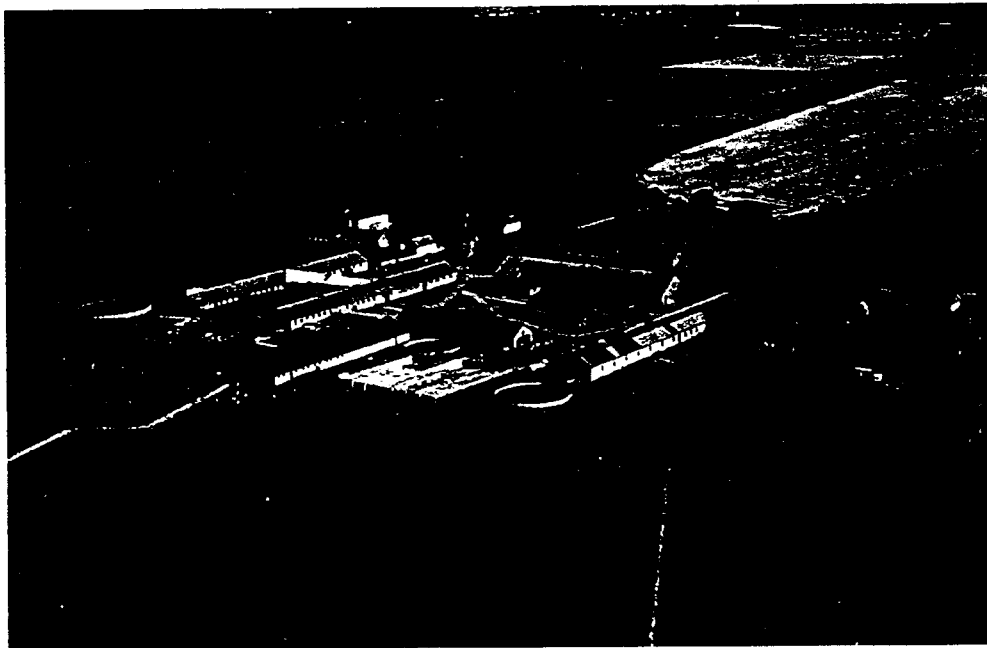
*Photo 57 Limestone potato cellars were constructed when the potato was first introduced here, early in the 19th century. Anders Johansson.*



*Photo 58 Resmo, Parish of Resmo. The landless population lived in "malmen", on the outskirts of the village. Anders Johansson.*



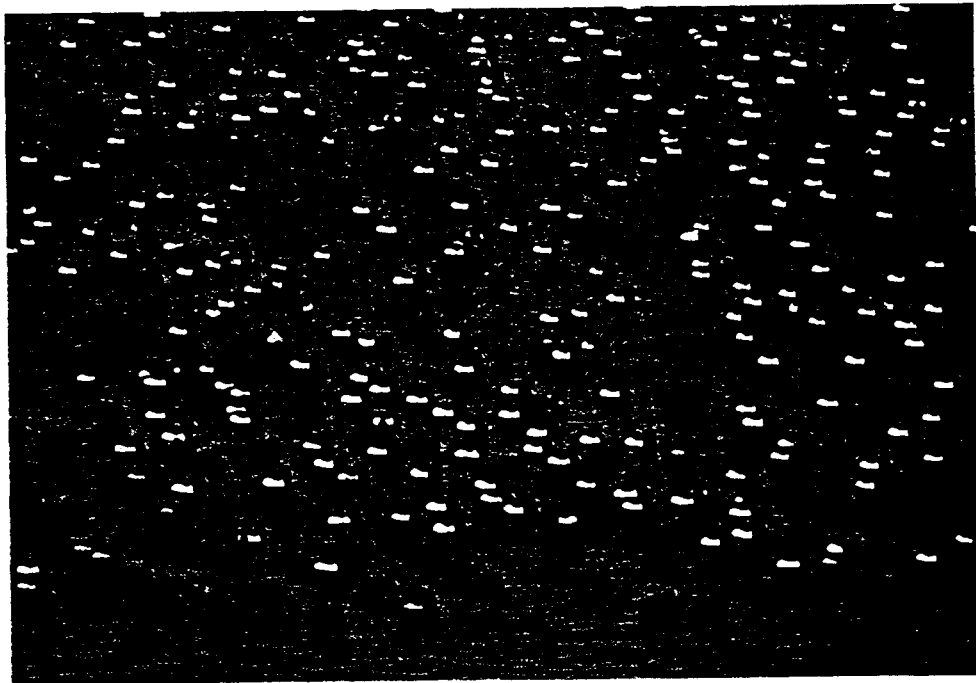
*Photo 59 Ottenby, Parish of Ås. Ottenby Royal Manor was founded by King Gustav Vasa. The present corps de logis dates from 1804. Anders Johansson.*



*Photo 60 Ottenby, Parish of Ås. Ottenby Royal Manor is Öland's biggest farming enterprise, with extensive grazing lands round the southern tip of the island. Jan Norman, National Heritage Board.*



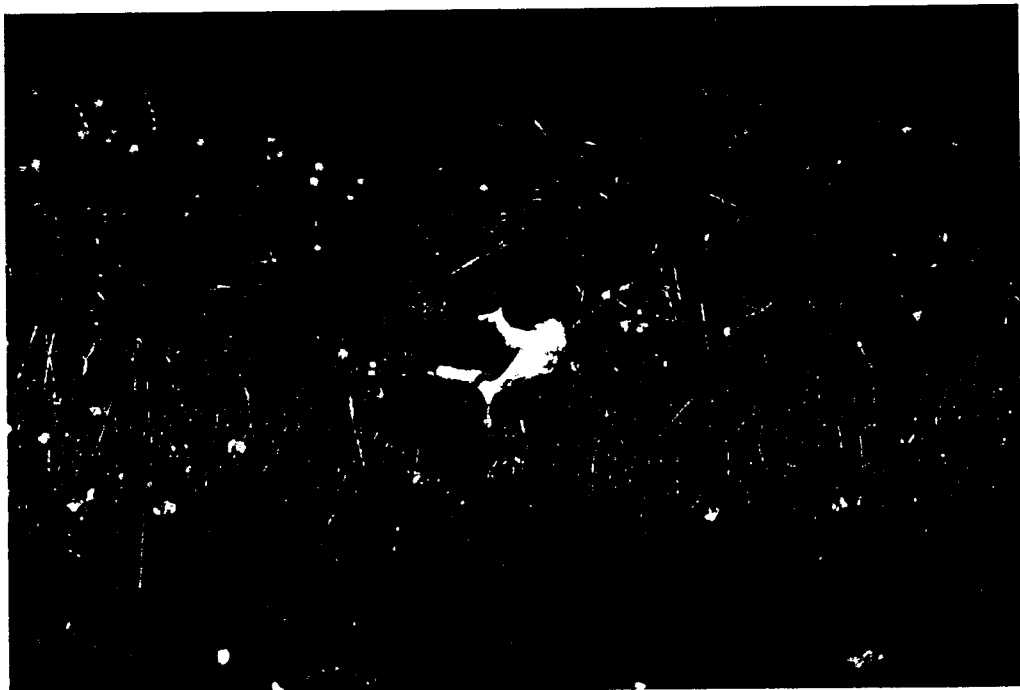
*Photo 61 Ottenby, Parish of Ås. The well-grazed lands at the southern tip of the island are a precondition of the abundant birdlife. Located on the promontory are Ottenby Naturum (an ornithological centre) and the lighthouse village clustering round the Långe Jan ("Long John") lighthouse, which was built in 1785. Jan Norman, National Heritage Board.*



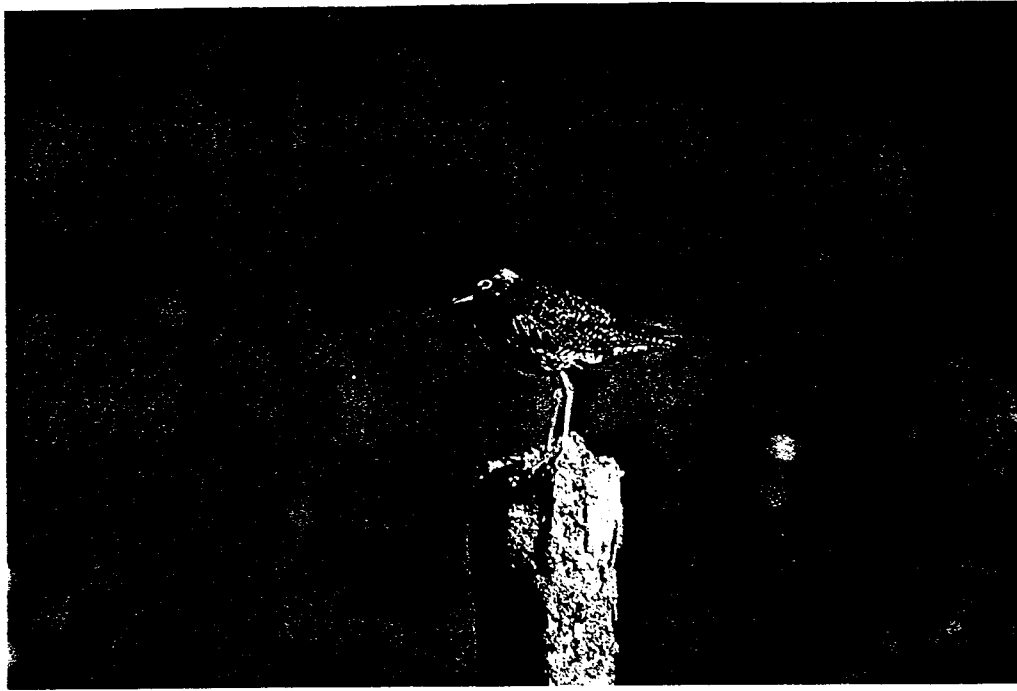
*Photo 62 Seabirds rest in large numbers along the coasts of Öland in spring and autumn. Pictured here is the tufted duck (Aythya fuligula). Ingemar Karlsson.*



*Photo 63 Like many other wader species, the black-tailed godwit (*Limosa limosa*) is dependent on open, moist lands and nests in the coastlands and in the alvar wetlands.*



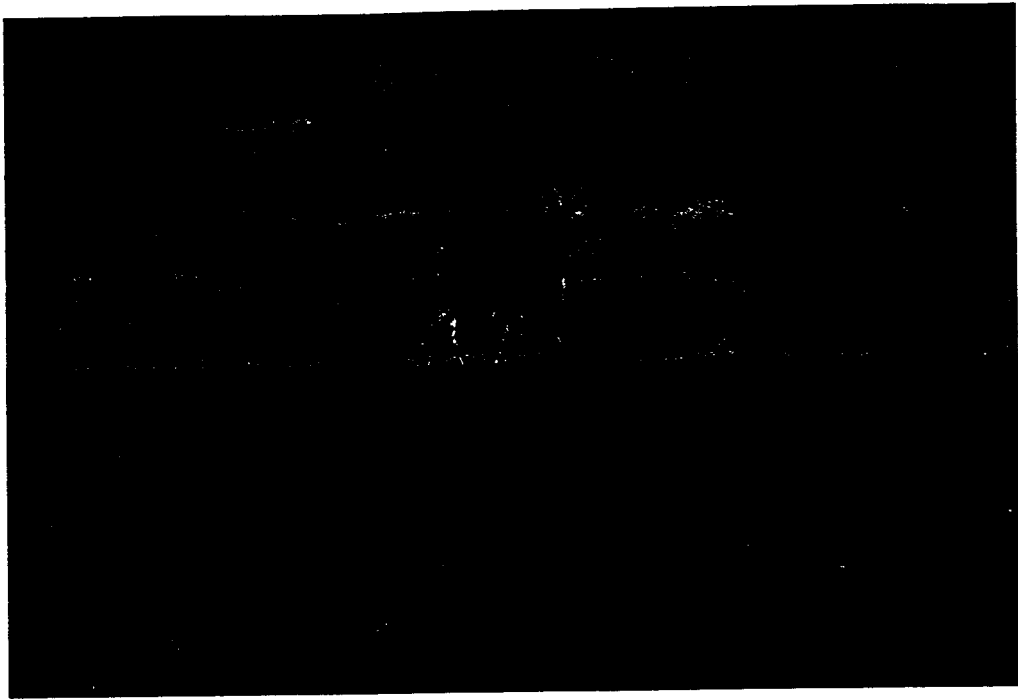
*Photo 64 The oystercatcher (*Haematopus ostralegus*) nests on the shores of Öland, on the alvar or in stony fields. Ingemar Karlsson.*



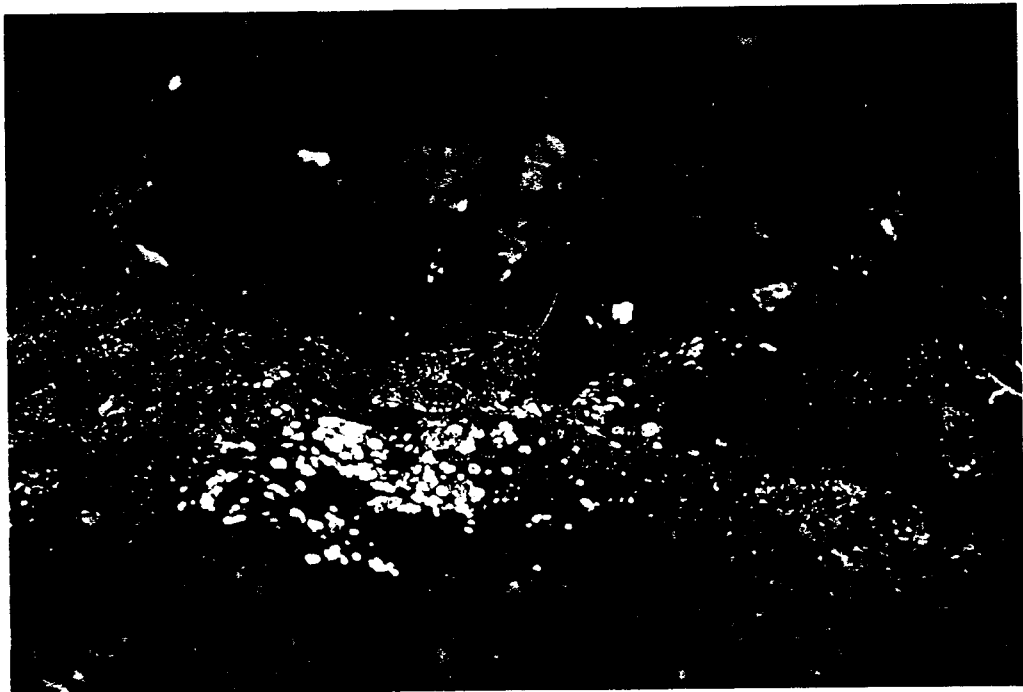
*Photo 65 One of the distinctive birds of the coastlands is the redshank (Tringa totanus). Ingemar Karlsson.*



*Photo 66 The partridge (Perdix perdix) has diminished in numbers in large parts of the Nordic area but remains common in the agrarian landscape of Öland. Ingemar Karlsson.*

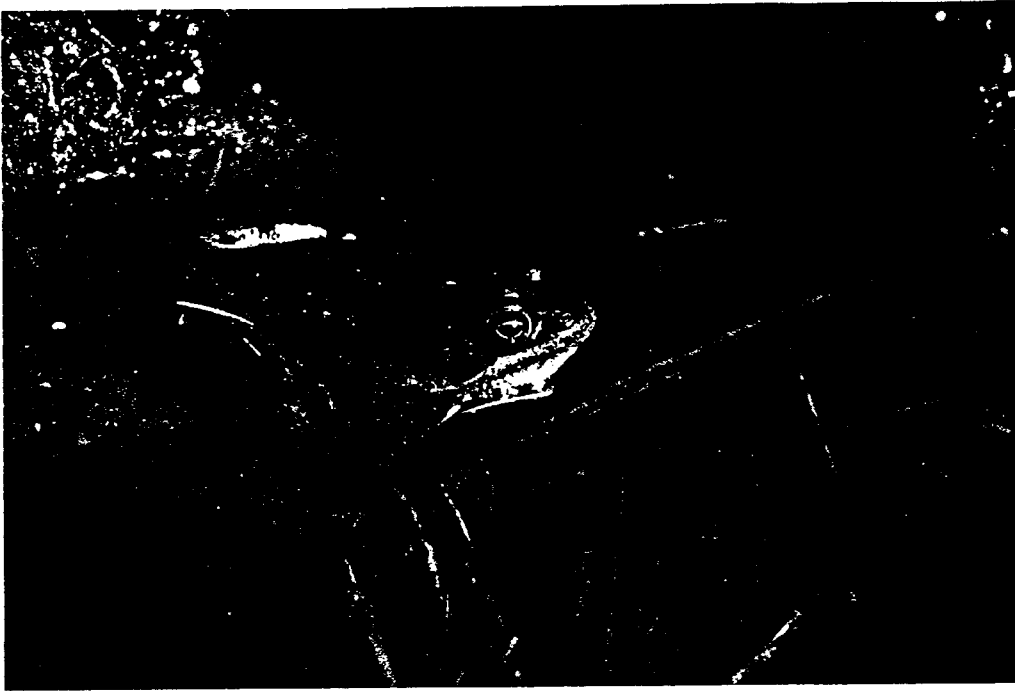


*Photo 67 The elk (Alces alces), pictured here on Stora Alvaret, is widespread on Öland. Ingemar Karlsson.*

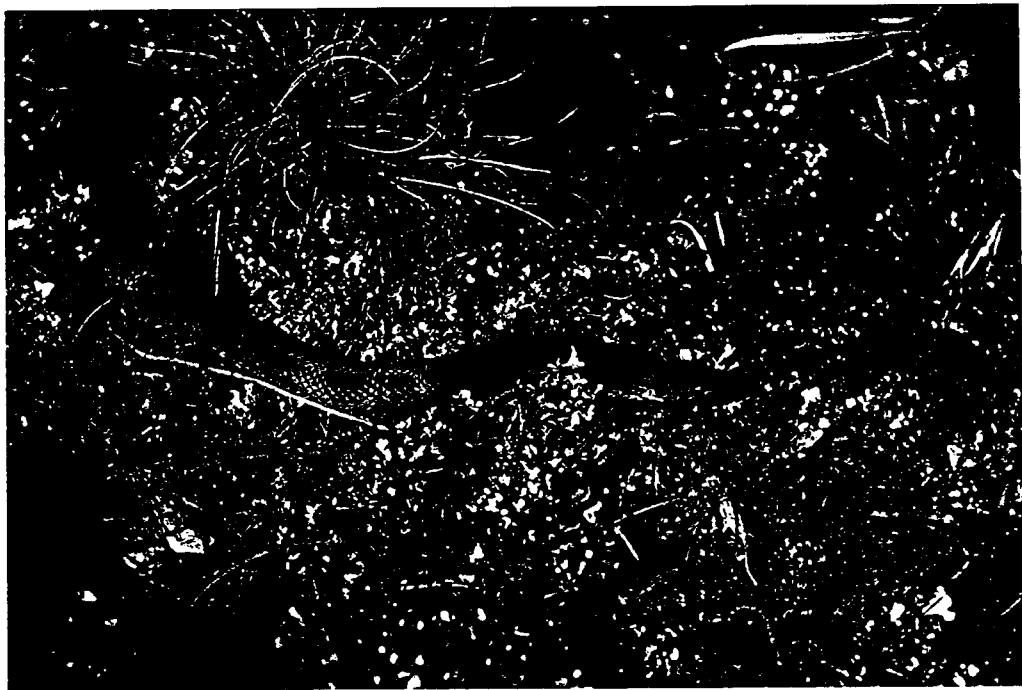


*Photo 68 The well-camouflaged pink-winged grasshopper (Bryodemella tuberculata) occurs on the limestone bedrock alvar and has its main distribution in Siberia. Ingemar Karlsson.*





*Photo 69 The agile frog (Rana dalmatina) exists in Öland but has its main distribution in Central Europe. Ingemar Karlsson.*



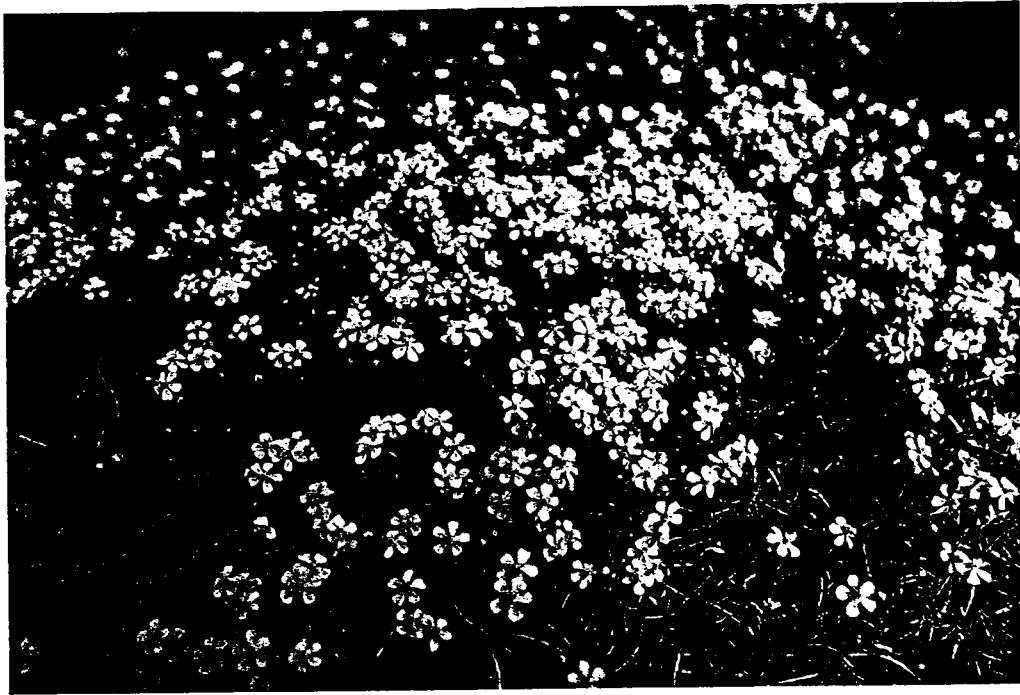
*Photo 70 The smooth snake (Coronella austriaca) lives mainly on other reptiles and, like the agile frog, has its main distribution in Central Europe. Ingemar Karlsson.*



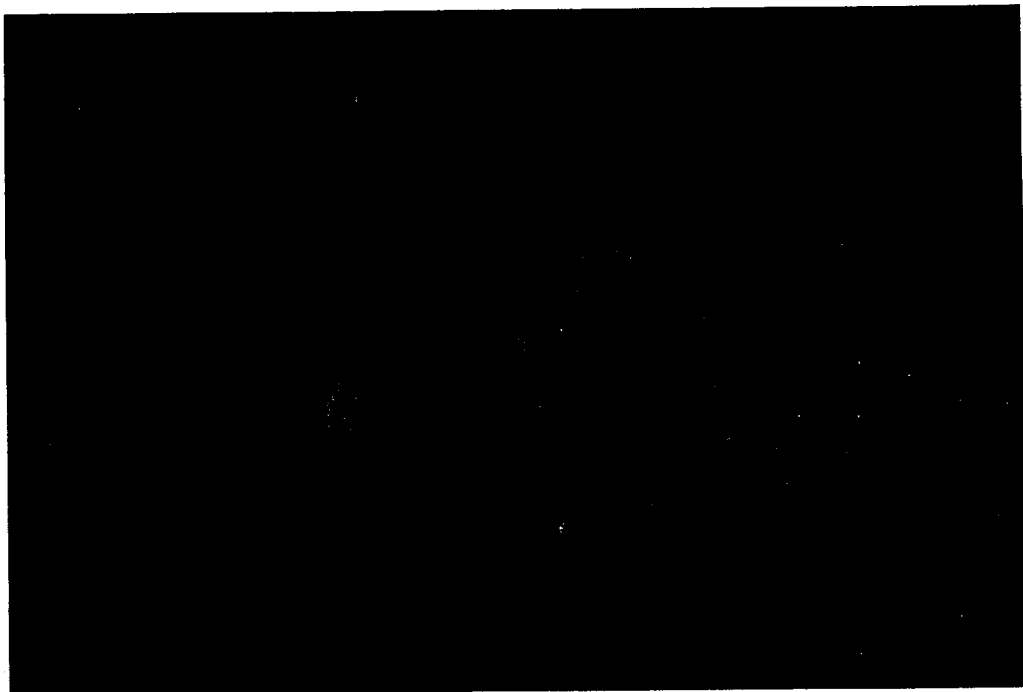
*Photo 71 The two lichen species Thamnolia vermicularis (left) and Cetraria nivalis (right) have an Alpine distribution but also occur on the thin soils of Stora Alvaret. Anders Johansson.*



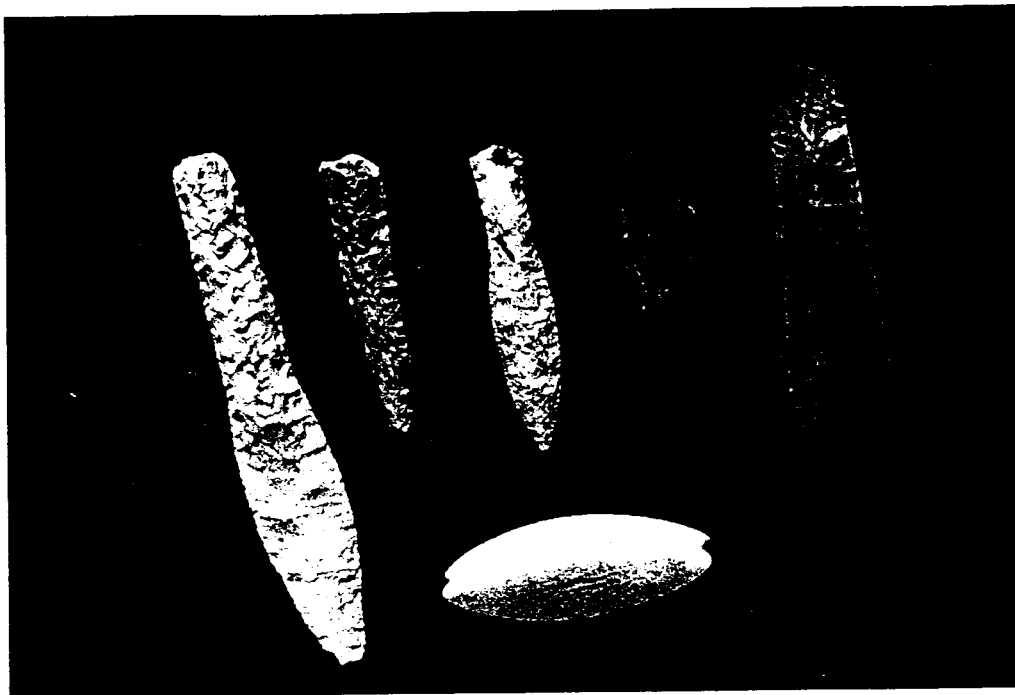
*Photo 72 Common globularia (Globularia vulgaris) is found in a small area of Southwestern Europe and in Öland and Gotland. Pictured on the right is the Öland rockrose (Helianthemum oelandicum). Anders Johansson.*



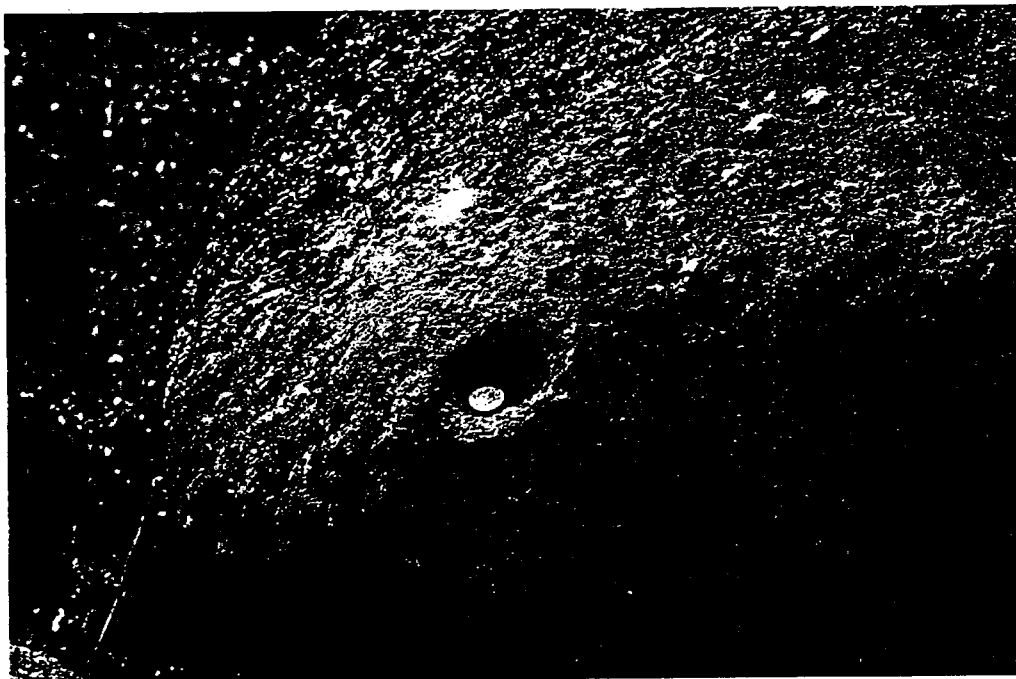
*Photo 73 The Öland rockrose (Helianthemum oelandicum) is endemic to Öland and occurs in the thin, frost-weathered residual deposits of the alvar. Ingemar Karlsson.*



*Photo 74 Orthoceratites were a kind of shelled octopus living in the Ordovician period, between 440 and 510 million years ago, and are now preserved as numerous fossils in the limestone of Öland. Ingemar Karlsson.*



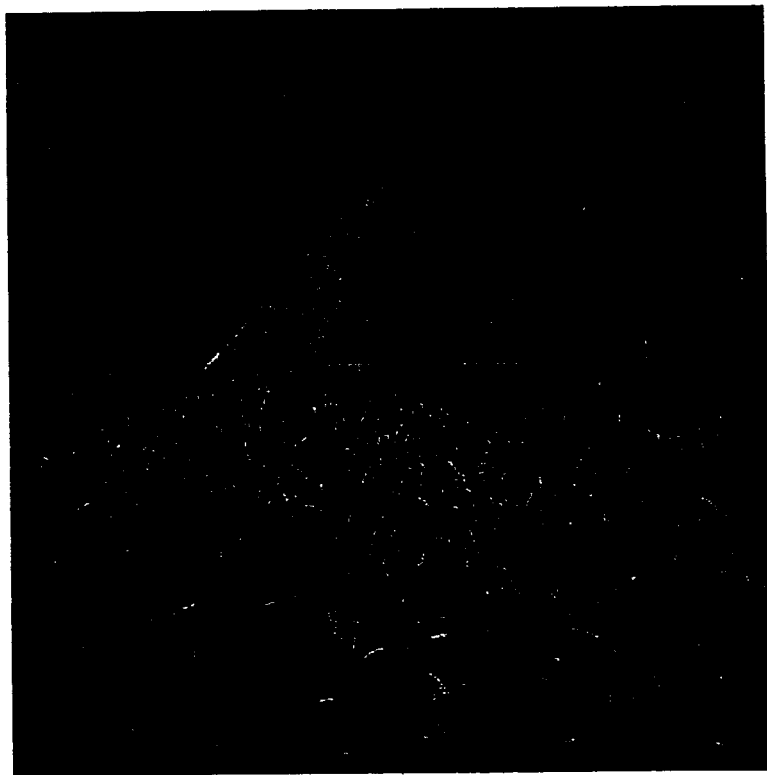
*Photo 75 Kvinnsgröta, Parish of Gräsgård. These flint axes were found in the soil in one and the same village. Ingemar Karlsson.*



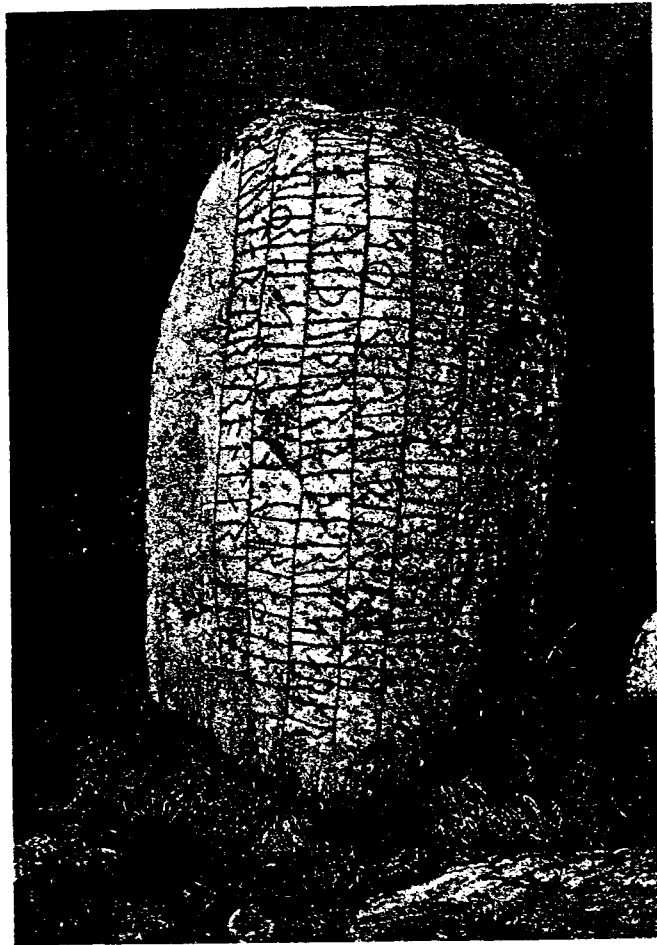
*Photo 76 Cup marks can occur on large boulders set in the ground. Most of them are from the Bronze Age. Ingemar Karlsson.*



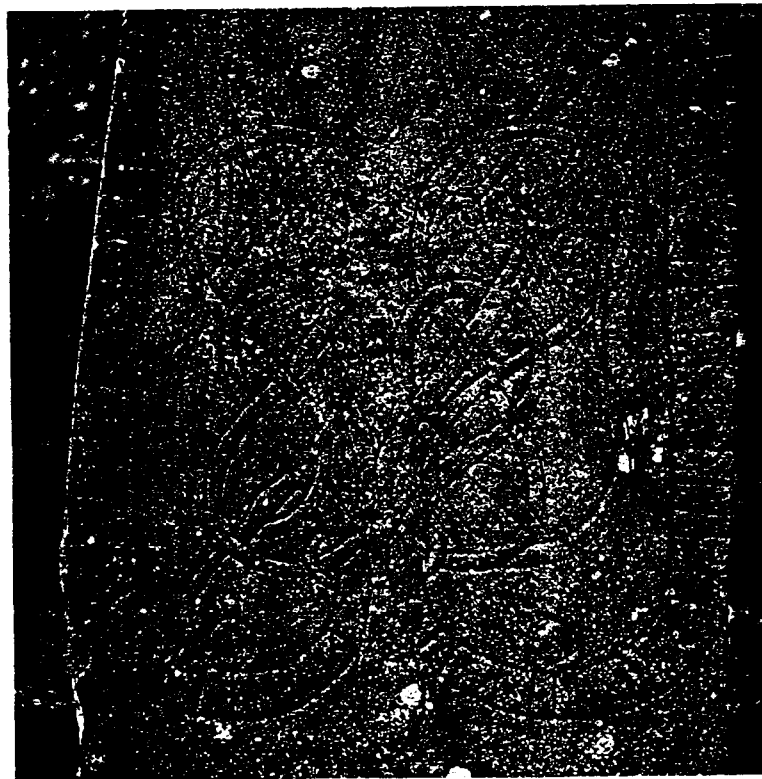
*Photo 77* Getlinge, Parish of Södra (South) Möckleby. The ship-setting is a burial form which occurred in the Late Iron Age. Ingemar Karlsson.



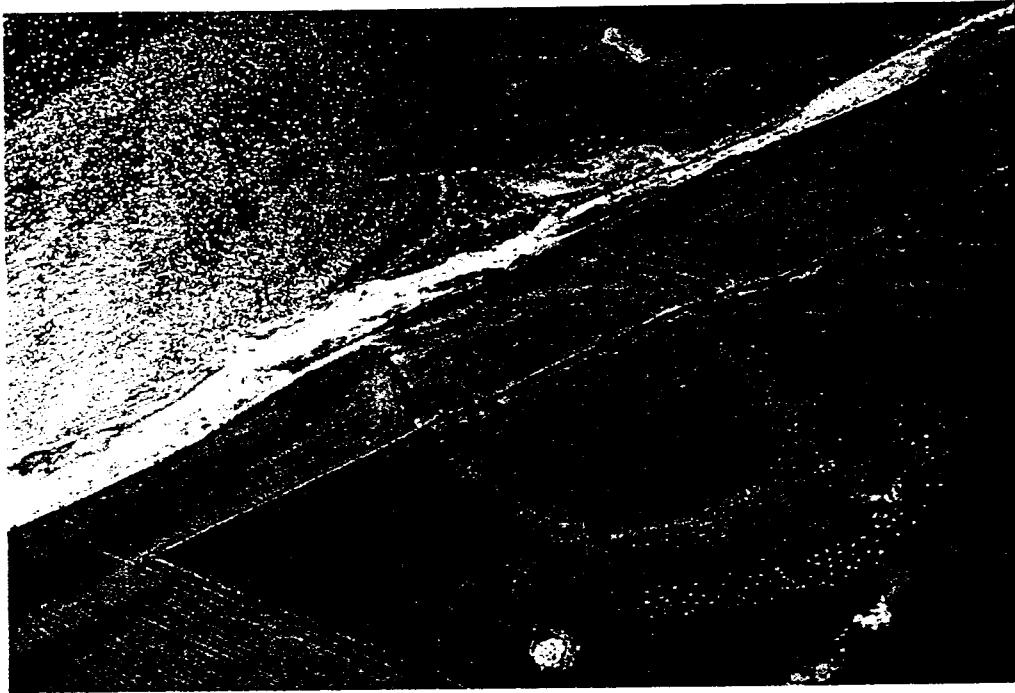
*Photo 78* Albrunna, Parish of Södra (South) Möckleby. Standing stone. Anders Johansson.



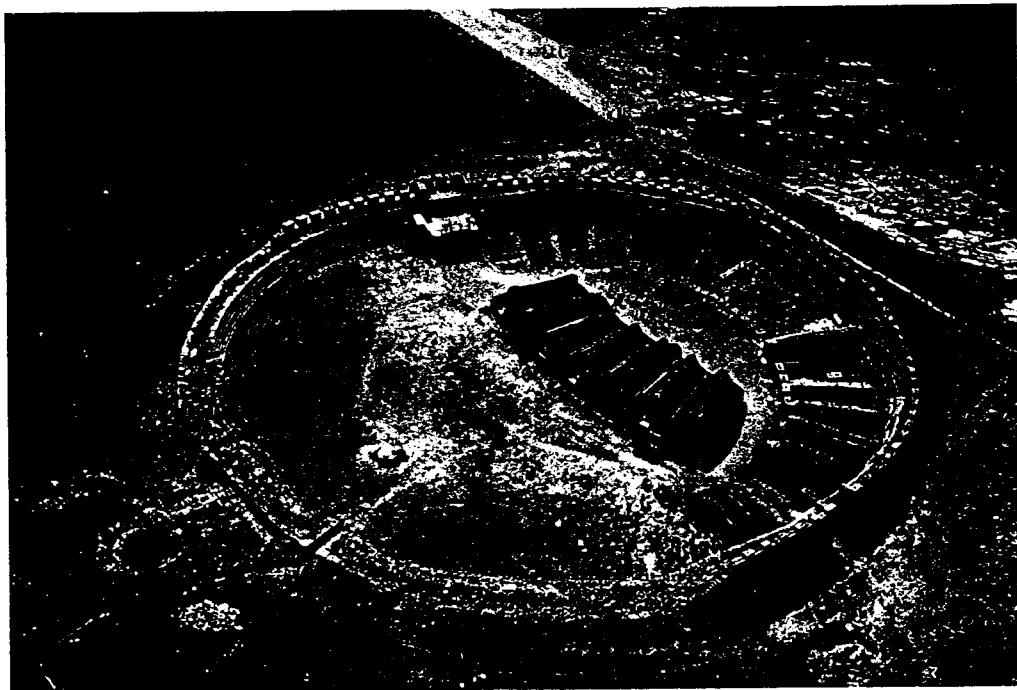
*Photo 79* Karlevi, Parish of Vickleby. The Karlevi Stone, one of the 20 or more runestones of Southern Öland, commemorates a man called Sibbe the Wise. Ingemar Karlsson.



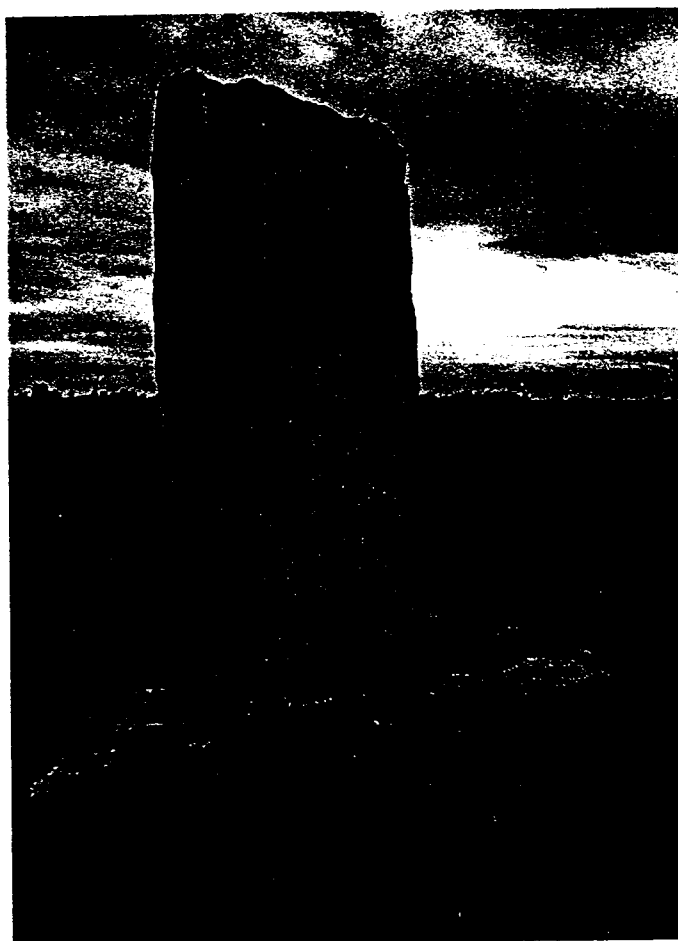
*Photo 80* Sandby, Parish of Sandby. Runestones are inscribed with Old Norse runic characters and decorative loops. Anders Johansson.



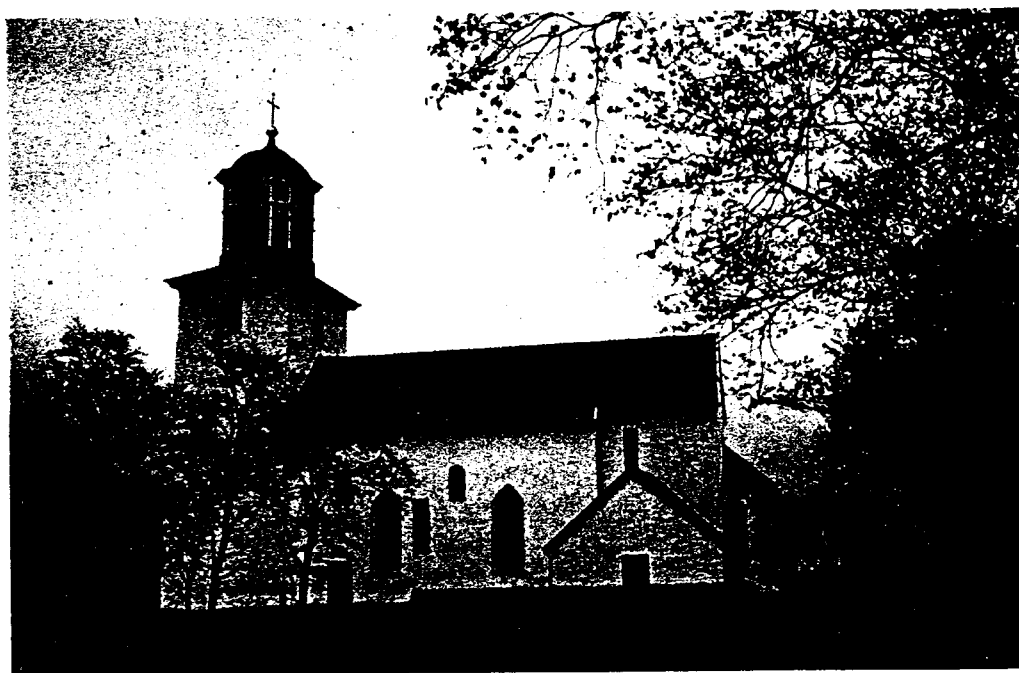
*Photo 81 Sandbyborg, Parish of Sandby. Inside the prehistoric fort, one can still make out the foundations of the houses which once stood there. Jan Norman, National Heritage Board.*



*Photo 82 Eketorp, Parish of Gräsgård. Excavation of Eketorp Prehistoric Fort began in 1964 and was followed by a reconstruction and rebuilding of the fort itself. Jan Norman, National Heritage Board.*

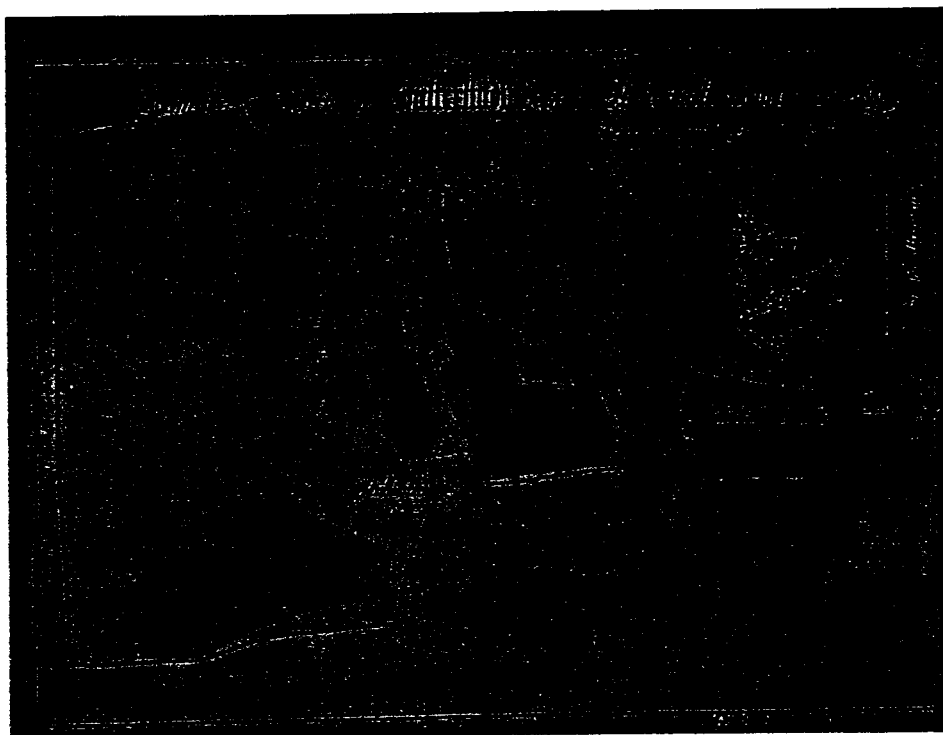


*Photo 83* Tingstad Flisor, Parish of Kastlösa. One of the large standing stones at the "tingsplats" situated on Stora Alvaret. Ingemar Karlsson.

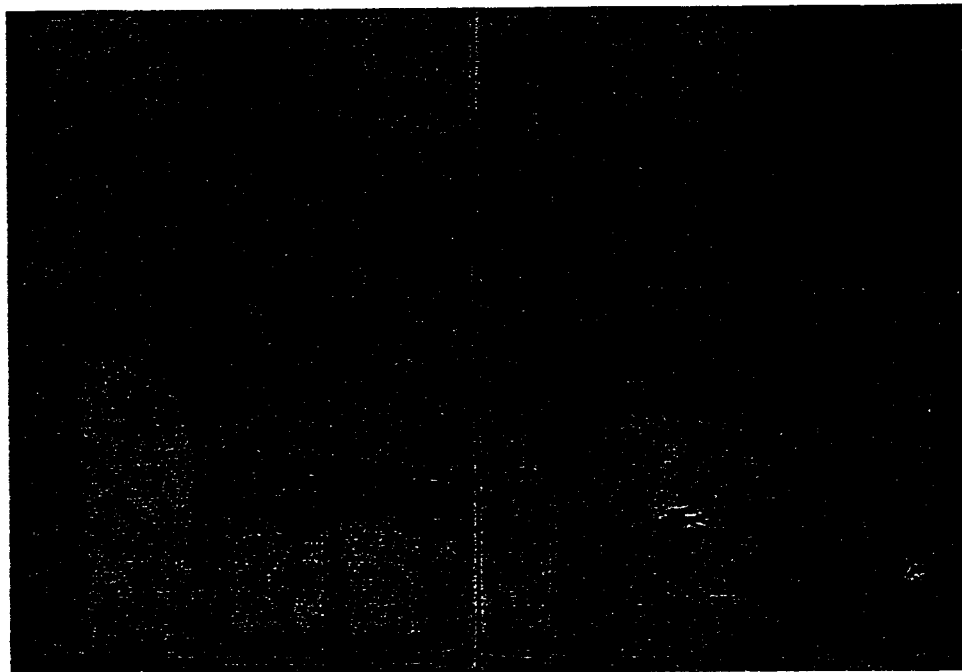


*Photo 84* Resmo, Parish of Resmo. Resmo Church ranks as one of the oldest in Öland. Courtesy of Kalmar County Museum.





*Photo 85 Map of the village of Hulterstad, Parish of Hulterstad, 1641. Courtesy of the Swedish National Land Survey.*

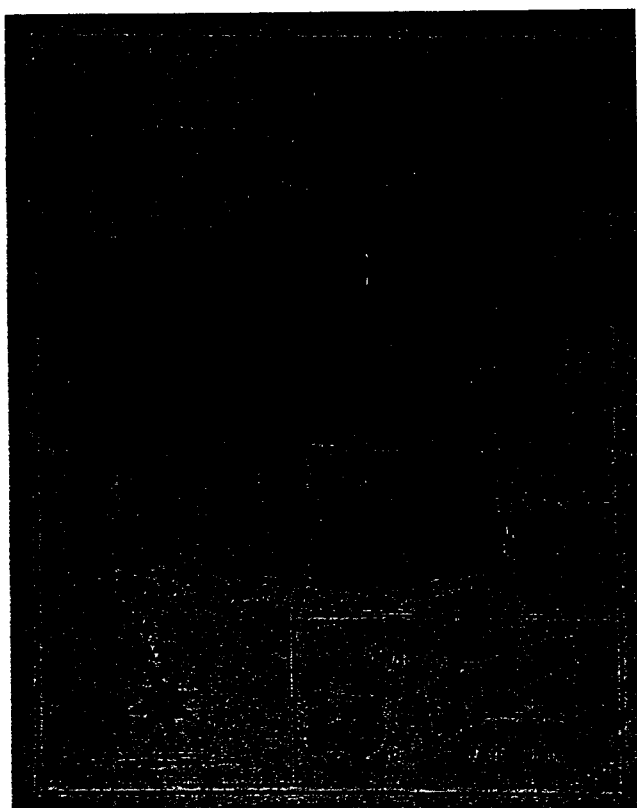


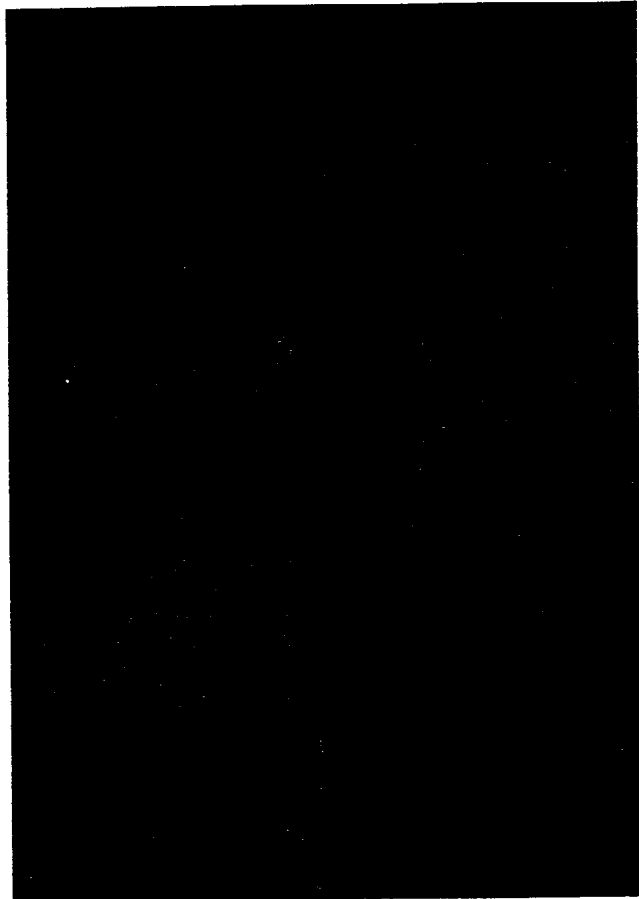
*Photo 86 Map of the village of Hulterstad, 1682. Courtesy of the Swedish National Land Survey.*

*Photo 87 Map of the village of  
Hulterstad, 1733. Courtesy of the  
Swedish National Land Survey.*

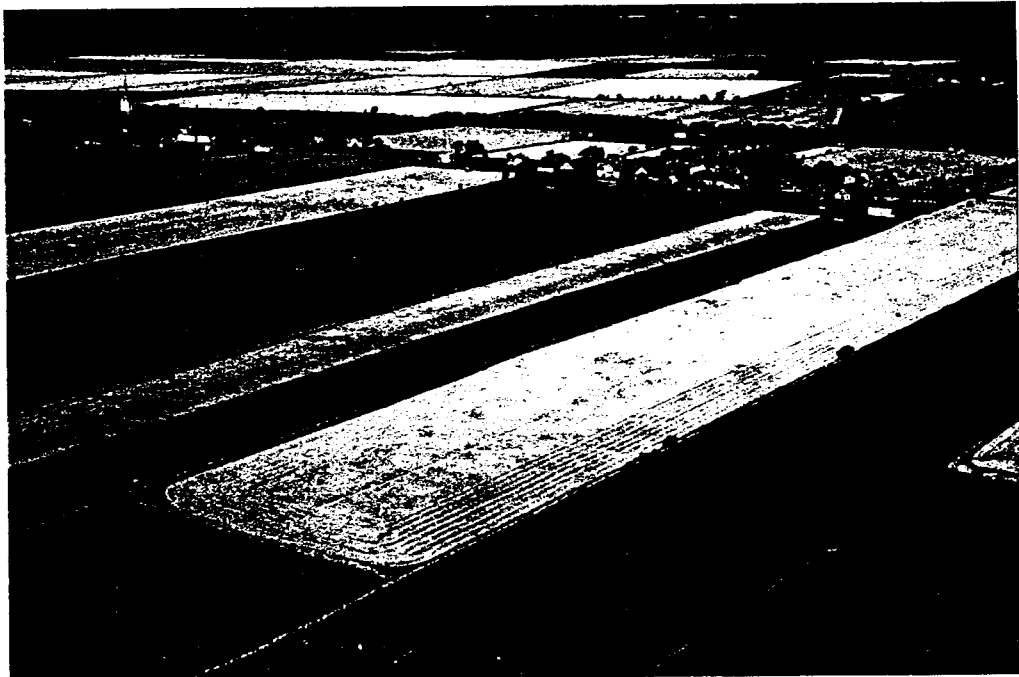


*Photo 88 Land redistribution  
(Storskifte) map of the village of  
Hulterstad, 1802. Courtesy of the  
Swedish National Land Survey.*

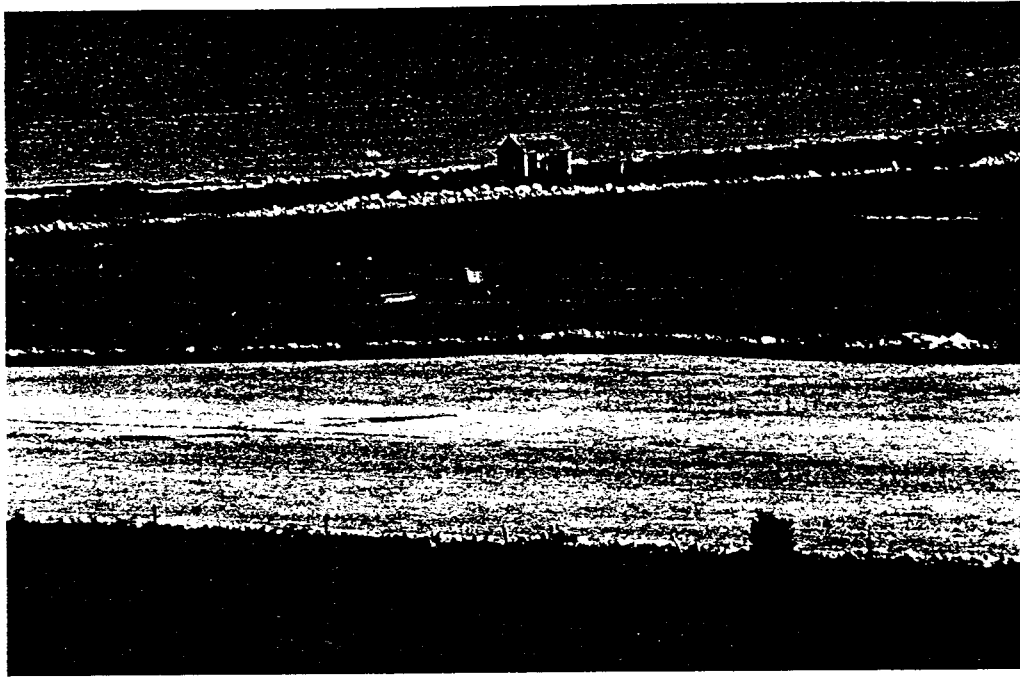




*Photo 89 Land redistribution (Laga skifte) map of the village of Hulterstad, 1836. Courtesy of the Swedish National Land Survey.*



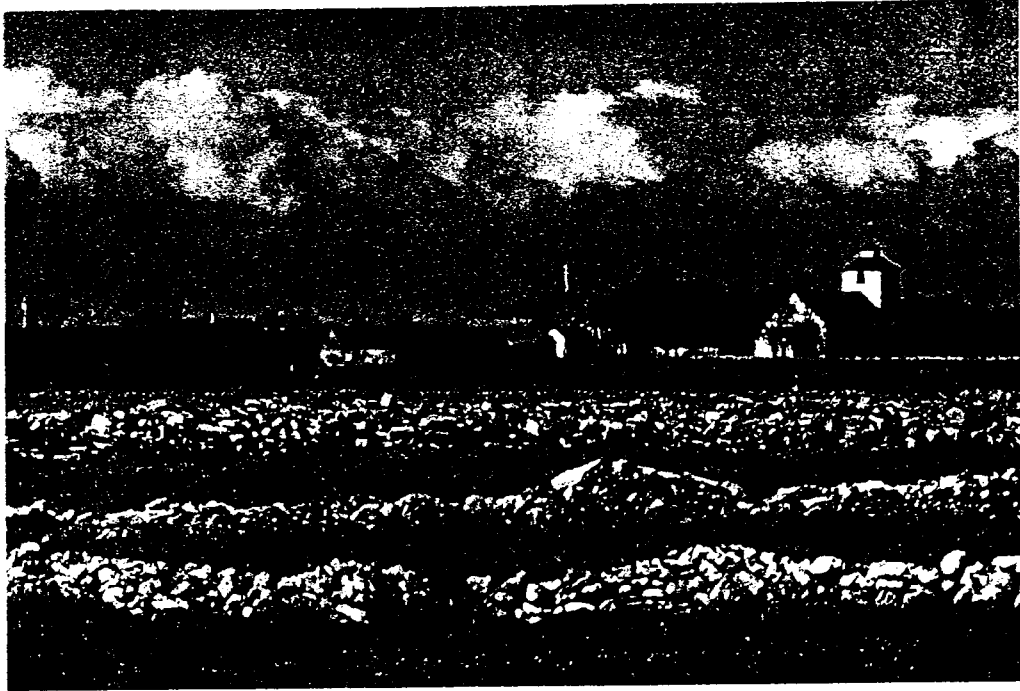
*Photo 90 Mellstaby, Parish of Gräsgård. The long, narrow strips are a result of the land redistributions effected in the 19th century. Jan Norman, National Heritage Board.*



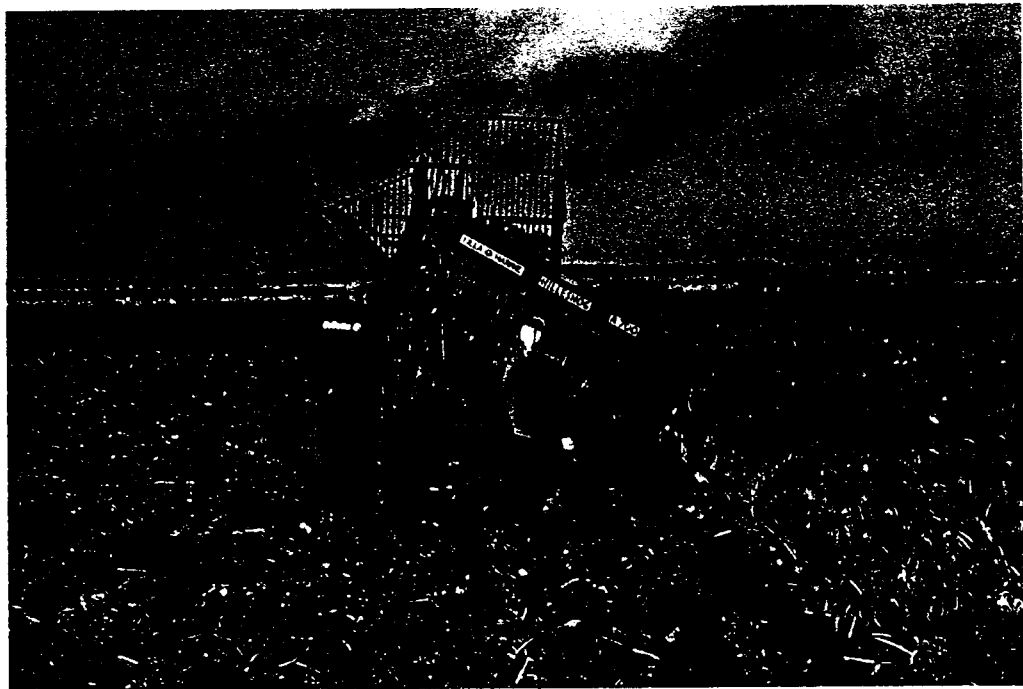
*Photo 91 Parish of Gräsård, showing the traditional stone-walled enclosures. Ingemar Karlsson.*



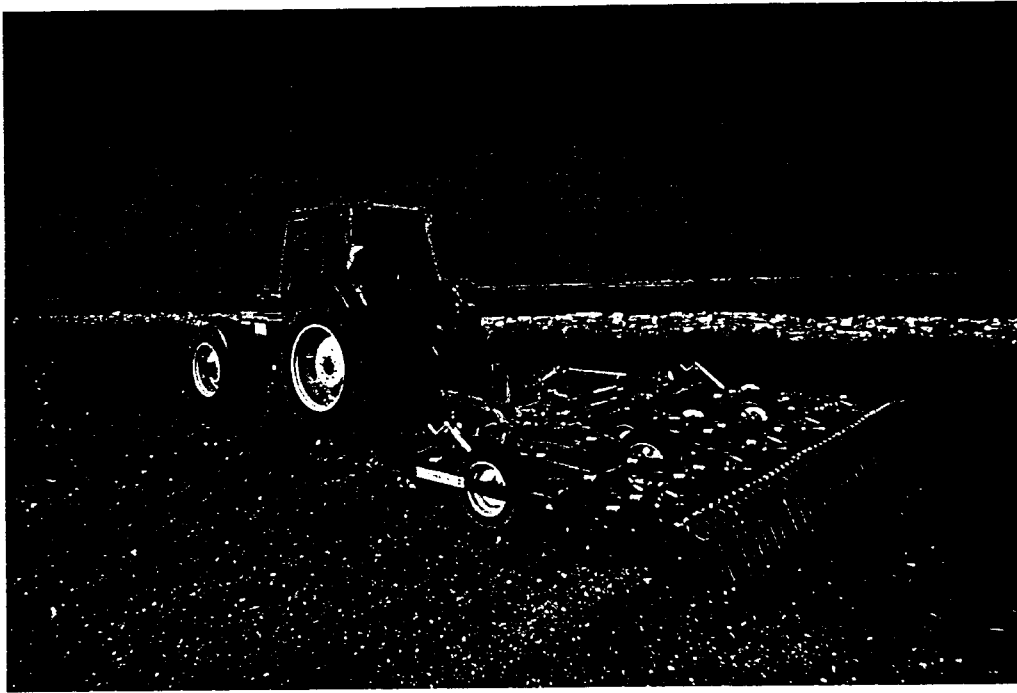
*Photo 92 Solberga, Parish of Gräsård. In the south of Öland, one of the great land redistribution reforms was introduced in all the villages during the 19th century. Jan Norman, National Heritage Board.*



*Photo 93 Hultestad, Parish of Hultestad. The village of Hultestad from the east, showing the parish church and stone walls. The coastlands in the foreground have also been distributed. Ingemar Karlsson.*



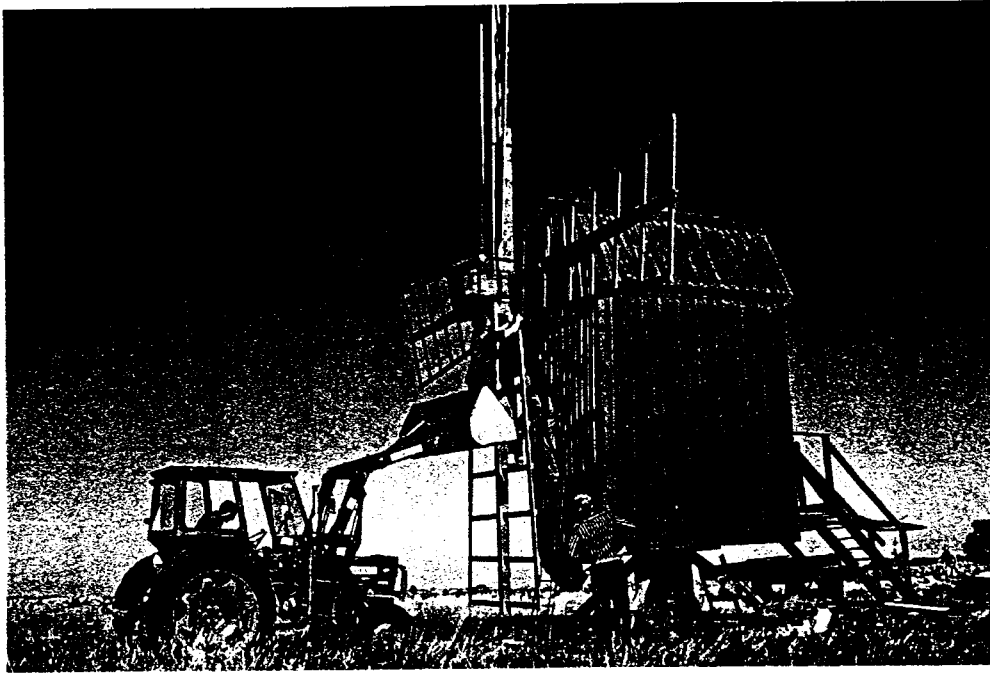
*Photo 94 Specialised crops like sugar beet are grown mainly in the fertile Mörbylånga valley. Ingemar Karlsson.*



*Photo 95 Arable farming today is based on rational methods and modern technology. Ingemar Karlsson.*



*Photo 96 Driving the cows home through the village street at milking time. The contiguity of farmsteads in the linear village has kept this tradition alive. Ingemar Karlsson.*



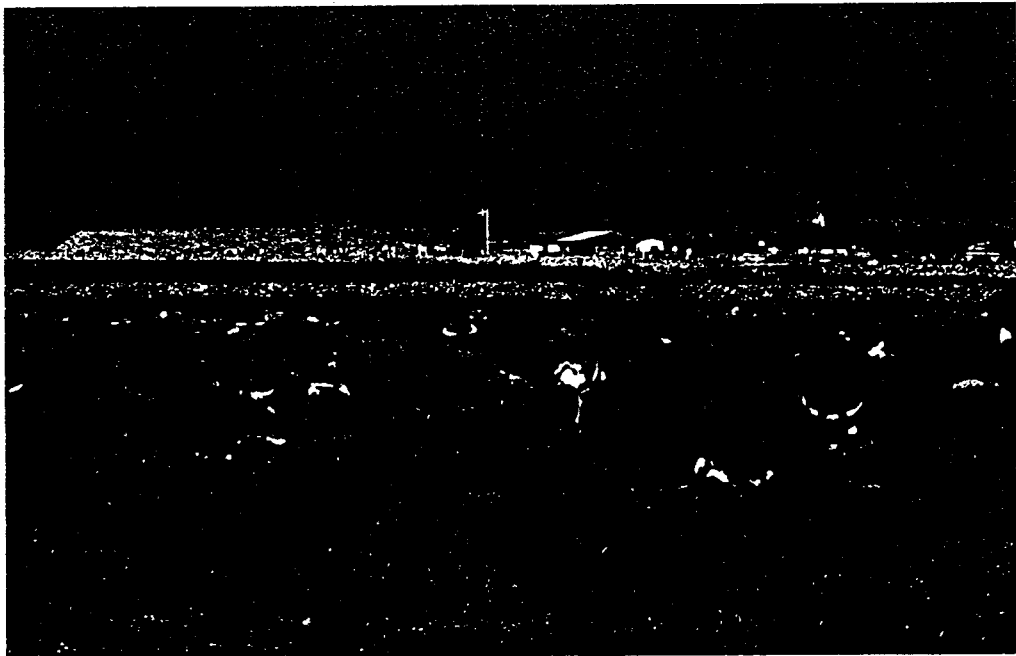
*Photo 97 The windmills are exposed to wind and weather and require regular attention. Many are maintained by local volunteer organisations. Ingemar Karlsson.*



*Photo 98 Restoring a stone wall. The tradition of dry stone-walling is dying out, but as yet the skill survives among older farmers. Ingemar Karlsson.*



*Photo 99 Stone wall on Stora Alvaret, with a special arrangement for watering livestock. Ingemar Karlsson.*



*Photo 100 Eketorp, Parish of Gräsgård. The restored prehistoric fort at Eketorp is a popular tourist attraction. Ingemar Karlsson.*

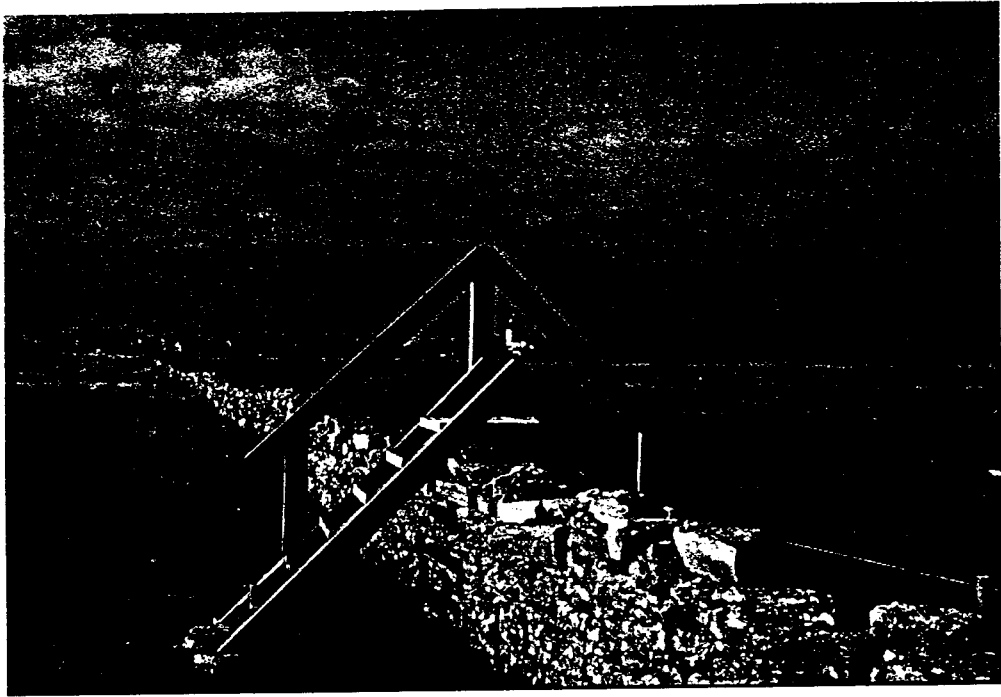




*Photo 101 Eketorp, Parish of Gräsgård. At Eketorp, some of the everyday life in an Iron Age fort has been re-created, including old domestic livestock breeds, for example. There are activities here for visitors of all ages. Ingemar Karlsson.*

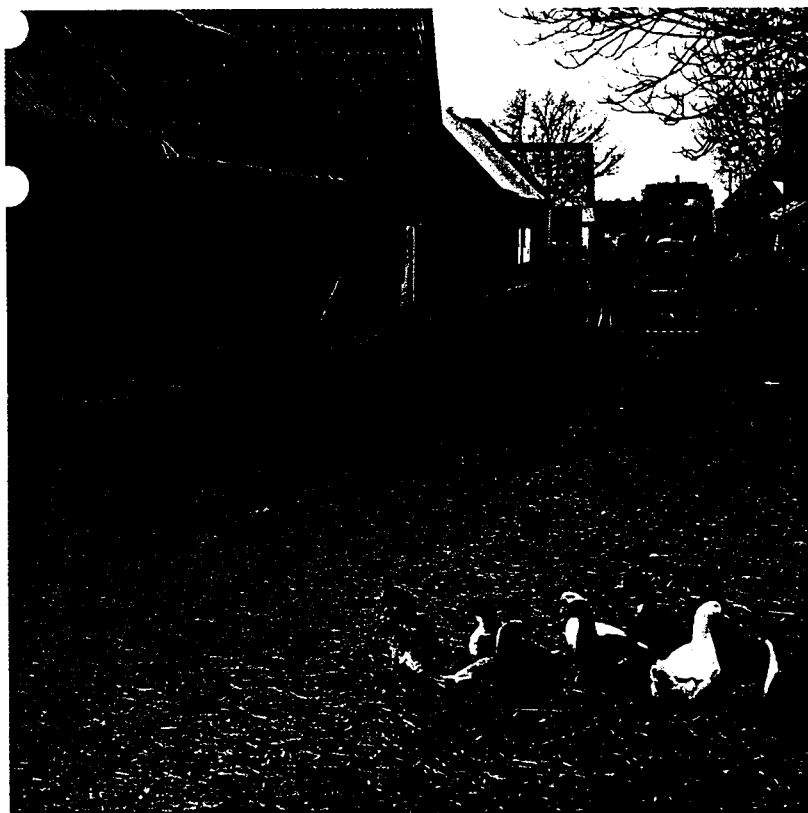
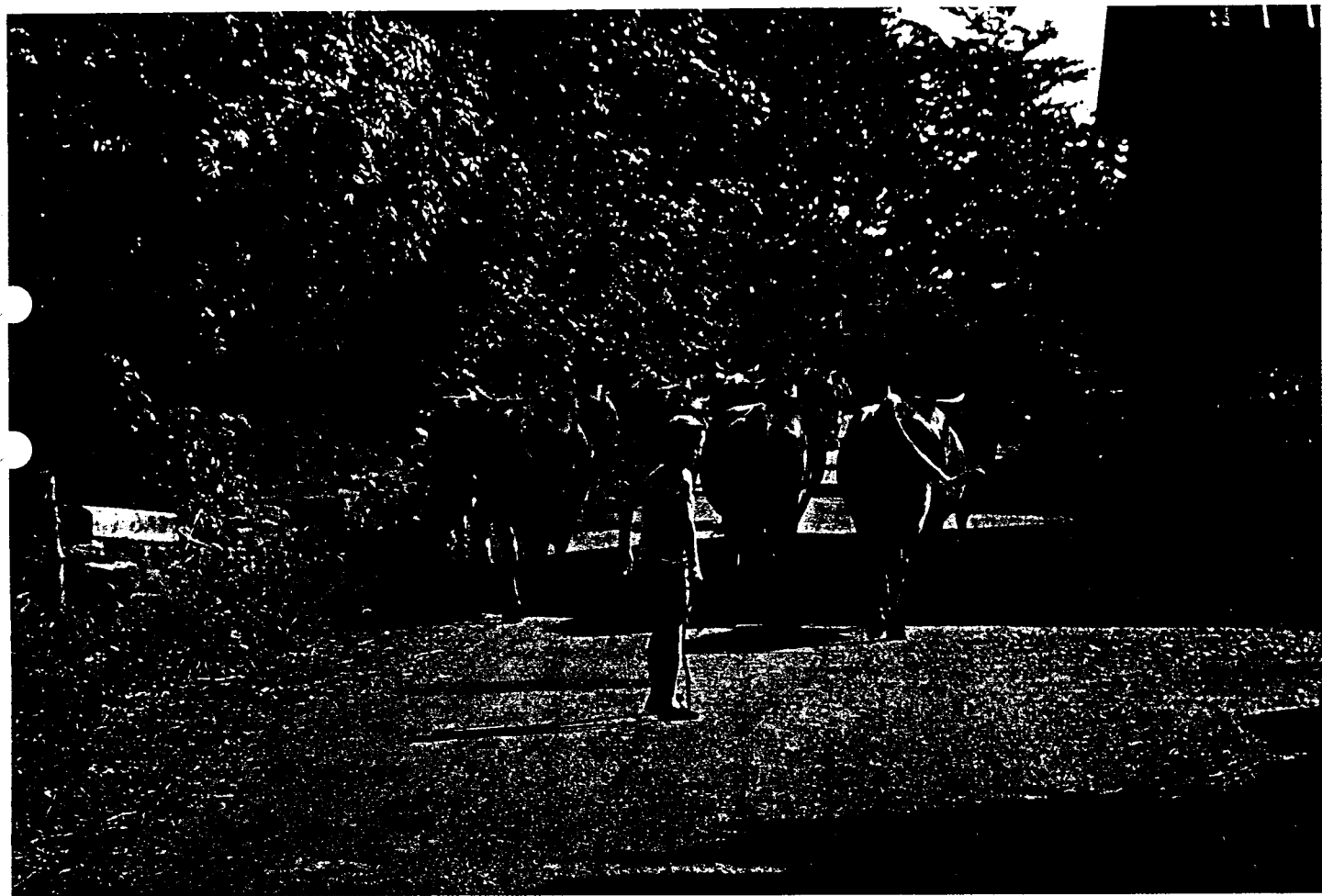


*Photo 102 "Everyman's Right" (the right of common access) enables everyone to move freely in the countryside, with due consideration for nature. Ingemar Karlsson.*



*Photo 103* By simple means, the countryside is made accessible to visitors. Christina Almqvist.

# *Man and his animals in the agricultural landscape of Öland*



# *Man and his animals in the agricultural landscape of Öland*



# Lantbrukets byggnader på Öland

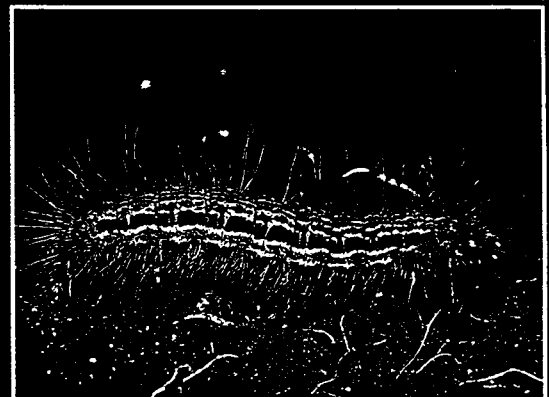
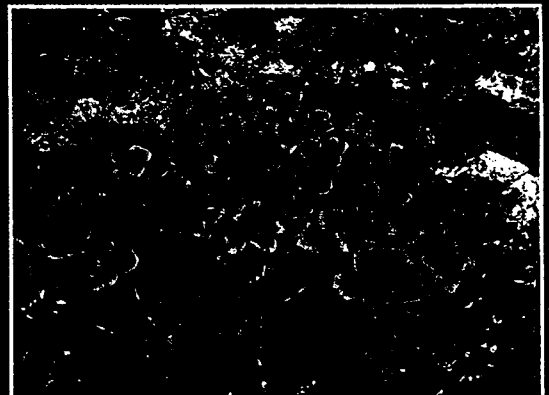
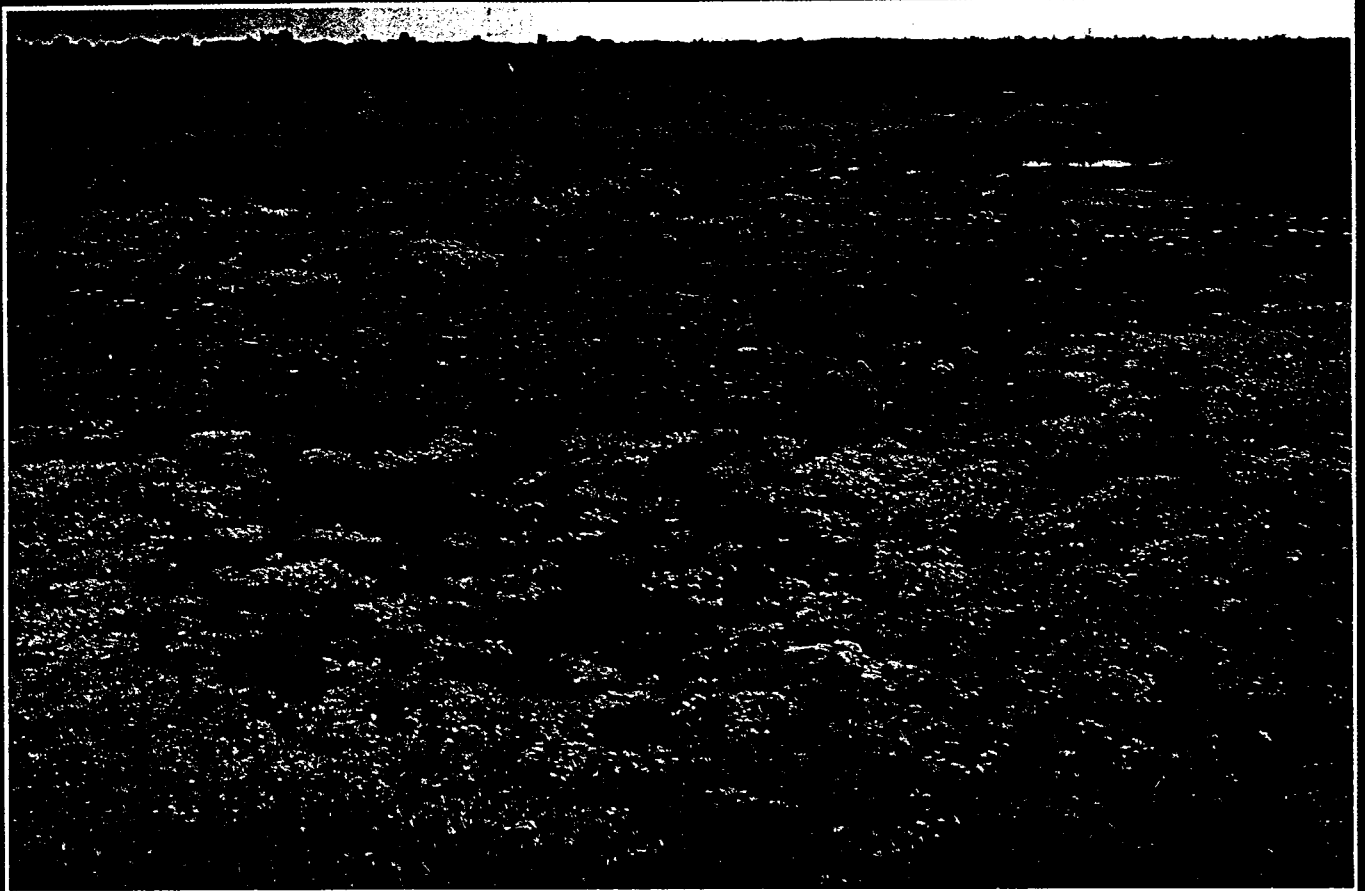


# *Plants and animals of the Countryside of Öland*



LÄNSSTYRELSEN  
KALMAR LÄN

# *Plants and animals on the alvars of Öland*



## Types of vegetation and typical plant species of Stora Alvaret

The following descriptions are intended to exemplify the species occurring in the various vegetation types of the alvar. They are not to be regarded as an exhaustive account of the plant sociology. These traditional plant habitats of the alvar are cross-referenced where possible to the classification prepared by the Nordic Council of Ministers. (Påhlsson 1994, 1999).

A more scientific subdivision will be found in the following publications: Albertsson 1950, Rosén 1982, Krahulec et al. 1986. Species amplitudes are given in Bengtsson et al. 1988. The nomenclature conforms to Karlsson 1997.

*Alvar dry grassland type* occurs on crests of the alvar deeper soils. This environment is wholly dependent on grazing if it is not to become overgrown with juniper bushes, which take root easily in the deeper soils. The crests are usually littoral formations of sand and gravel, but wave-washed boulder clay ridges with superficial layers of gravel can also occur. They have a neutral – faintly acid soil reaction and a dark-coloured topsoil layer which is of great importance for the vegetation. The environment is highly polyspecific, up to 27 plant species having been observed within 10 × 10 cm plots. Many of the species in this environment have their main amplitude in southern or southeastern Europe (see [Appendix 5](#)). Two groups of alvar dry grassland can be distinguished: one occurring in a healthy environment and the other in an arid environment.

– *Alvar dry grassland – healthy environments*: neutral – faintly acid soil reaction, soil depth: 15 – 50 cm. (Herb-rich meadow oat-grass grassland type, alvar variant)

cat's foot	<i>Antennaria dioica</i>	<i>Asteraceae</i>
Öland wormwood	<i>Artemisia oelandica</i>	<i>Asteraceae</i>
dyer's woodruff	<i>Asperula tinctoria</i>	<i>Rubiaceae</i>
goldilocks	<i>Aster linosyris</i>	<i>Asteraceae</i>
moonwort	<i>Botrychium lunaria</i>	<i>Ophioglossaceae</i>
quaking grass	<i>Briza media</i>	<i>Poaceae</i>
heather	<i>Calluna vulgaris</i>	<i>Ericaceae</i>
peach-leaved bellflower	<i>Campanula persiciflora</i>	<i>Campanulaceae</i>
brown knapweed	<i>Centaurea jacea</i>	<i>Asteraceae</i>
heath grass	<i>Danthonia decumbens</i>	<i>Poaceae</i>
northern bedstraw	<i>Galium boreale</i>	<i>Rubiaceae</i>
rockrose	<i>Helianthemum nummularium</i>	<i>Cistaceae</i>
meadow oat-grass	<i>Helictotrichon (Avenula) pratense</i>	<i>Poaceae</i>
downy oat-grass	<i>Helictotrichon (Avenula) pubescens</i>	<i>Poaceae</i>
field wood-rush	<i>Luzula campestris</i>	<i>Juncaceae</i>
yellow milk-vetch	<i>Oxytropis campestris</i>	<i>Fabaceae</i>
common tormentil	<i>Potentilla erecta</i>	<i>Rosaceae</i>
spring cinquefoil	<i>Potentilla tabernaemontani</i>	<i>Rosaceae</i>
large self-heal	<i>Prunella grandiflora</i>	<i>Scrophulariaceae</i>



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moor grass	<i>Sesleria caerulea</i>	Poaceae
mountain clover	<i>Trifolium montanum</i>	Fabaceae
spiked speedwell	<i>Veronica spicata</i>	Scrophulariaceae
lichens	<i>Cetraria cucullata</i>	
	<i>Cladonia ciliata</i>	
reindeer moss	<i>Cladonia rangiferina</i>	
mosses:	<i>Abietinella abietina</i>	
	<i>Dicranum scoparium</i>	
	<i>Hylocomium splendens</i>	
	<i>Hypnum cupressiforme</i>	
	<i>Ptilidium ciliare</i>	
	<i>Rhodobryum roseum</i>	
	<i>Rhytidium rugosum</i>	

– *Alvar dry grassland – arid environments*: neutral – faintly acid soil reaction, soil depth 15 – 40 cm. (Herb-rich meadow oat-grass grassland type, alvar variant)

common bent	<i>Agrostis capillaris</i>	Poaceae
brown bent	<i>Agrostis vinealis</i>	Poaceae
crow garlic	<i>Allium vineale</i>	Liliaceae
pasque flower	<i>Anemone pratensis</i>	Ranunculaceae
scented vernal grass	<i>Anthoxanthum odoratum</i>	Poaceae
kidney vetch	<i>Anthyllis vulneraria</i>	Fabaceae
soft brome	<i>Bromus hordeaceus</i>	Poaceae
slender hare's ear	<i>Bupleurum tenuissimum</i>	Apiaceae
little mouse-ear	<i>Cerastium semidecandrum</i>	Caryophyllaceae
elder-flowered orchid	<i>Dactylorhiza sambucina</i>	Orchidaceae
maiden pink	<i>Dianthus deltoides</i>	Caryophyllaceae
sheep's fescue	<i>Festuca ovina</i>	Poaceae
dropwort	<i>Filipendula vulgaris</i>	Rosaceae
lady's bedstraw	<i>Galium verum</i>	Rubiaceae
meadow oat-grass	<i>Helictotrichon (Avenula) pratense</i>	Poaceae
bird's foot trefoil	<i>Lotus corniculatus</i>	Fabaceae
alpine catchfly	<i>Lychnis alpina</i> ssp. <i>oelandica</i>	Caryophyllaceae
black medick	<i>Medicago lupulina</i>	Fabaceae
early purple orchid	<i>Orchis mascula</i>	Orchidaceae
green-winged orchid	<i>Orchis morio</i>	Orchidaceae
purple-stem catstail	<i>Phleum phleoides</i>	Poaceae
ribwort plantain	<i>Plantago lanceolata</i>	Plantaginaceae
greater butterfly orchid	<i>Platanthera chlorantha</i>	Orchidaceae
bulbous buttercup	<i>Ranunculus bulbosus</i>	Ranunculaceae
hairy buttercup	<i>Ranunculus illyricus</i>	Ranunculaceae
savory	<i>Satureja acinos</i>	Lamiaceae
meadow saxifrage	<i>Saxifraga granulata</i>	Saxifragaceae
stonecrop	<i>Sedum rupestre</i>	Crassulaceae
lesser stitchwort	<i>Stellaria graminea</i>	Caryophyllaceae
hare's-foot clover	<i>Trifolium arvense</i>	Fabaceae
hop trefoil	<i>Trifolium campestre</i>	Fabaceae
lesser trefoil	<i>Trifolium dubium</i>	Fabaceae
knotted clover	<i>Trifolium striatum</i>	Fabaceae
wall speedwell	<i>Veronica arvensis</i>	Scrophulariaceae

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spiked speedwell	<i>Veronica spicata</i>	<i>Scrophulariaceae</i>
smooth tare	<i>Vicia tetrasperma</i>	<i>Fabaceae</i>
<b>lichens:</b>		
Iceland moss	<i>Cetraria islandica</i> <i>Cladina ciliata</i> <i>Cladonia arbuscula</i> <i>Cladonia furcata</i> <i>Cladonia macroceras</i>	
cup lichen	<i>Cladonia pyxidata</i> <i>Pelthigera rufescens</i>	
<b>mosses:</b>		
	<i>Abietinella abietina</i> <i>Barbilophozia barbata</i> <i>Campylium chrysophyllum</i> <i>Dicranum scoparium</i> <i>Entosthodon fascicularis</i> <i>Fissidens cristatus</i> <i>Homalothesium lutescens</i> <i>Homalothesium sericeum</i> <i>Phascum cuspidatum</i> <i>Plagiomnium affine</i> <i>Pleuridium subulatum</i> <i>Racomitrium canescens</i> <i>Tortula ruralis</i>	

***Calcareous moist grassland type rich in herbs***

*Moist grassland* occurs in declivities with fine soil and good water retention capacity. Tree and bush colonisation in this environment is impeded by a high water level in the late winter/early spring. Moor grass can become wholly predominant on thinner soils. Calcareous moist grasslands have by tradition been grazed. In the absence of grazing, cinquefoil can come to predominate in this environment. Basic soil reaction. (Herb-rich moist grassland type

glaucous sedge	<i>Carex flacca</i>	<i>Cyperaceae</i>
tawny sedge	<i>Carex hostiana</i>	<i>Cyperaceae</i>
carnation sedge	<i>Carex panicea</i>	<i>Cyperaceae</i>
flecked marsh orchid	<i>Dactylorhiza cruenta</i>	<i>Orchidaceae</i>
early marsh orchid	<i>Dactylorhiza incarnata</i>	<i>Orchidaceae</i>
(early marsh orchid, var.)	<i>Dactylorhiza ochroleuca</i>	<i>Orchidaceae</i>
marsh helleborine	<i>Epipactis palustris</i>	<i>Orchidaceae</i>
broad-leaved cotton grass	<i>Eriophorum latifolium</i>	<i>Cyperaceae</i>
dune gentian	<i>Gentianella uliginosa</i>	<i>Gentianaceae</i>
fragrant orchid	<i>Gymnadenia conopsea</i>	<i>Orchidaceae</i>
fragrant orchid (var.)	<i>Gymnadenia conopsea</i> var. <i>densiflora</i>	<i>Orchidaceae</i>
musk orchid	<i>Herminium monorchis</i>	<i>Orchidaceae</i>
Irish fleabane	<i>Inula salicina</i>	<i>Asteraceae</i>
purple moor grass	<i>Molinia caerulea</i>	<i>Poaceae</i>
fly orchid	<i>Ophrys insectifera</i>	<i>Orchidaceae</i>
grass of Parnassus	<i>Parnassia palustris</i>	<i>Parnassiaceae</i>
butterwort	<i>Pinguicula vulgaris</i>	<i>Lentibulariaceae</i>
dwarf milkwort	<i>Polygala amarella</i>	<i>Polygalaceae</i>
common tormentil	<i>Potentilla erecta</i>	<i>Rosaceae</i>

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shrubby cinquefoil	<i>Potentilla (Dasiphora) fruticosa</i>	<i>Rosaceae</i>
bird's eye primrose	<i>Primula farinosa</i>	<i>Primulaceae</i>
brown bog-rush	<i>Schoenus ferrugineus</i>	<i>Cyperaceae</i>
moor grass	<i>Sesleria caerulea</i>	<i>Poaceae</i>
devil's bit scabious	<i>Succisa pratensis</i>	<i>Dipsacaceae</i>
meadow violet	<i>Viola pumila</i>	<i>Violaceae</i>
mosses:		
	<i>Campylium chrysophyllum</i>	
	<i>Campylium elodes</i>	
	<i>Ctenidium molluscum</i>	
	<i>Fissidens adianthoides</i>	
	<i>Pseudocalligeron turgescens</i>	
	<i>Scorpidium revolvens</i>	
	<i>Thuidium philiberti</i>	

### *Sheep's fescue alvar type*

Large parts of the outcrop areas are covered by residual deposits formed by the underlying limestone, mainly as a result of frost weathering and chemical erosion of the poorly drained ground. During summer the thin, fine-grained residual deposits become heavily dehydrated and are a very adverse environment for the majority of plants. In late summer, autumn and spring they are saturated with rainwater and meltwater. In winter the groundwater alternately freezes and thaws, causing powerful frost movements in the soil stratum. In this way *rutmark* is formed, i.e. polygons measuring about 1 dm<sup>2</sup>, with the finest material in the middle and the coarser like a stone ring round the edges. As a plant environment, the residual deposits of the alvar resemble the tundra which spread over northern Europe as the ice cap retreated. Gravelly patches with absolutely no vegetation form a mosaic together with tufts of grass and plant species with stout tap roots. (Sheep's fescue alvar type)

The sheep's fescue alvar type is a complex vegetation type which can be divided into several sub-groups, e.g. a *Globularia* group, a dwarf-shrub and lichen heath type and an *Agrostis stolonifera/ gigantea* group. Only the last two groups are represented in the lists of species below.

The *Globularia* group is a plant society having *Globularia vulgaris* as its dominant species. This society is often rich in herbs, with species such as the common fumana (*Fumana procumbens*), dark red helleborine (*Epipactis atrorubens*), kidney vetch (*Anthyllis vulneraria*), hairy rockrose (*Arabis hirsuta* var. *glaberrima*), twisted whitlow grass (*Draba incana*), St Bernard's lily (*Anthericum ramosum*), fastigate gypsophila (*Gypsophila fastigiata*), ciliate melick (*Melica ciliata*), spotted catsear (*Hypochoeris maculata*), tufted milkwort (*Polygala comosa*), common milkwort (*Polygala vulgaris*), vincetoxicum (*Vincetoxicum hirundinaria*) and Nottingham catchfly (*Silene nutans*).

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– *Sheep's fescue alvar type of the Agrostis stolonifera/gigantea group*: basic soil reaction, soil depth 5 – 10 cm, strong frost effect. This type of alvar occurs on the intermittently saturated, fine-grained residual deposits (alvar till) and in undrained declivities with strong frost movements. It consists of a sparse, small-tufted and relatively oligospecific vegetation cover which dries out easily at the height of summer.

black bent	<i>Agrostis gigantea</i>	Poaceae
creeping bent	<i>Agrostis stolonifera</i>	Poaceae
scarlet pimpernel	<i>Anagallis arvensis</i>	Primulaceae
small toadflax	<i>Chaenorhinum minus</i>	Scrophulariaceae
marsh hawksbeard	<i>Crepis tectorum</i> ssp. <i>pumila</i>	Asteraceae
fescue	<i>Festuca oelandica</i>	Poaceae
sheep's fescue	<i>Festuca ovina</i>	Poaceae
bedstraw	<i>Galium oelandicum</i>	Rubiaceae
hawkweed	<i>Hieracium praealtum</i>	Asteraceae
autumn hawkbit	<i>Leontodon autumnalis</i>	Asteraceae
timothy	<i>Phleum pratense</i> ssp. <i>bertolonii</i>	Poaceae
self-heal	<i>Prunella vulgaris</i>	Lamiaceae
knotted pearlwort	<i>Sagina nodosa</i>	Caryophyllaceae
thale cress	<i>Sisymbrium supinum</i>	Brassicaceae
lichens:		

*Fulgensia bracteata*

mosses:

*Campylium calcareum*  
*Campylium elodes*  
*Ctenidium molluscum*  
*Ditrichum flexicaule*  
*Drepanocladus* spp.  
*Myurella julacea*  
*Pseudocalligeron turgescens*  
*Tortella inclinata*  
*Tortella fragilis*  
*Tortella tortuosa*  
*Trichostomum crispulum*  
*Schistidium apocarpum*

– *Dwarf-shrub and lichen heath*: basic soil reaction, soil depth 10 – 15 cm, strong frost effect. Slightly drier, gravelly residual deposits present the *dwarf-shrub and lichen heath*. This is among other things the habit of the two endemic rockrose and bedstraw species. *Thamnolia vermicularis* and *Cetraria nivalis* are two lichen species which occur abundantly in this environment but are otherwise only to be found in the mountain regions. (Sheep's fescue alvar type, dwarf-shrub and lichen heath variant)

chives (var.)	<i>Allium schoenoprasum</i> ssp. <i>alvarense</i>	Liliaceae
northern androsace	<i>Androsace septentrionalis</i>	Primulaceae
hairy rockrose	<i>Arabis hirsuta</i> var. <i>glaberrima</i>	Brassicaceae
dyer's woodruff	<i>Asperula tinctoria</i>	Rubiaceae
dwarf mouse-ear	<i>Cerastium pumilum</i>	Caryophyllaceae
mouse-ear	<i>Cerastium glutinosum</i>	Caryophyllaceae
dwarf thistle	<i>Cirsium acaule</i>	Asteraceae
bedstraw	<i>Galium oelandicum</i>	Rubiaceae

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Öland rockrose	<i>Helianthemum oelandicum</i>	<i>Cistaceae</i>
Hutchinsia	<i>Hornungia petraea</i>	<i>Brassicaceae</i>
thyme broomrape	<i>Orobanche alba</i>	<i>Orobanchaceae</i>
spring cinquefoil	<i>Potentilla tabernaemontani</i>	<i>Rosaceae</i>
white stonecrop	<i>Sedum album</i>	<i>Crassulaceae</i>
campion	<i>Silene uniflora</i> ssp. <i>petraea</i>	<i>Caryophyllaceae</i>
wild thyme	<i>Thymus serpyllum</i>	<i>Lamiaceae</i>
lichens:		
	<i>Cetraria aculeata</i>	
Iceland moss	<i>Cetraria islandica</i>	
	<i>Cetraria nivalis</i>	
	<i>Cladonia foliacea</i>	
	<i>Cladonia furcata</i>	
	<i>Cladonia gracilis</i>	
	<i>Cladonia pocillum</i>	
	<i>Pelthigera rufescens</i>	
	<i>Thamnolia vermicularis</i>	
	<i>Vulpicida tubulosos</i>	
mosses:		
	<i>Athalamia hyalina</i>	
	<i>Bryum argenteum</i>	
	<i>Bryum capillare</i>	
	<i>Fissidens cristatus</i>	
	<i>Riccia sorocarpa</i>	
	<i>Tortella tortuosa</i>	

**Limestone bedrock alvar** basic soil reaction, soil depth 0 – 5 cm. The limestone bedrock alvar has only a very thin soil cover, if any. During the 11,000 years that have passed since the rocks emerged from the sea, the limestone has eroded so slowly that no loose deposits have accumulated. The clean surfaces of the rock are colonised initially by crustose lichens and then by cushion mosses. The moss cushions store a certain amount of moisture from rainfall, enabling small plants, mainly annuals, to take root.

chives	<i>Allium schoenoprasum</i> var. <i>alvarense</i>	<i>Liliaceae</i>
dense silky-bent	<i>Apera interrupta</i>	<i>Poaceae</i>
thyme-leaved sandwort	<i>Arenaria serpyllifolia</i>	<i>Caryophyllaceae</i>
soft brome	<i>Bromus hordeaceus</i>	<i>Poaceae</i>
mouse-ear	<i>Cerastium glutinosum</i>	<i>Caryophyllaceae</i>
dwarf mouse-ear	<i>Cerastium pumilum</i>	<i>Caryophyllaceae</i>
marsh hawkhead	<i>Crepis tectorum</i> ssp. <i>pumila</i>	<i>Asteraceae</i>
whitlow grass	<i>Erophila verna</i>	<i>Brassicaceae</i>
northern bedstraw	<i>Galium boreale</i>	<i>Rubiaceae</i>
Hutchinsia	<i>Hornungia petraea</i>	<i>Brassicaceae</i>
alpine meadow grass	<i>Poa alpina</i>	<i>Poaceae</i>
bulbous meadow grass	<i>Poa bulbosa</i>	<i>Poaceae</i>
rue-leaved saxifrage	<i>Saxifraga tridactylites</i>	<i>Saxifragaceae</i>
savory	<i>Satureja acinos</i>	<i>Lamiaceae</i>
wall pepper	<i>Sedum acre</i>	<i>Crassulaceae</i>
white stonecrop	<i>Sedum annuum</i>	<i>Crassulaceae</i>
wild thyme	<i>Thymus serpyllum</i>	<i>Lamiaceae</i>

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lichens:

*Cetraria aculeata*  
*Cetraria nivalis*  
*Cladonia furcata*  
*Cladonia symphycarpa*  
*Fulgensia bracteata*  
*Lecanora calcarea*  
*Lecidea lurida*  
*Psora decipiens*  
*Thamnolia vermicularis*  
*Verrucaria nigrescens*

mosses:

*Didymodon ferrugineus*  
*Ditrichum flexicaule*  
*Encalypta rhaptocarpa*  
*Encalypta vulgaris*  
*Grimmia pulvinata*  
*Myurella julacea*  
*Orthotrichum cupulatum*  
*Pseudoleskeella catenulata*  
*Riccia subifurca*  
*Scapania calcicola*  
*Scistidium apocarpum*  
*Tortella inclinata*  
*Tortella tortuosa*  
*Tortula ruralis*

– *Fissure vegetation in limestone bedrock alvar*: basic soil reaction, soil depth 2 – 20 cm. The outcrops are often traversed by fissures which can be of great age. Often they follow zones of weakness which have resulted from movements in the earth's crust.

St Bernard's lily	<i>Anthericum liliago</i>	Liliaceae
St Bernard's lily	<i>Anthericum ramosum</i>	Liliaceae
harebell	<i>Campanula rotundifolia</i>	Campanulaceae
glaucous sedge	<i>Carex flacca</i>	Cyperaceae
common fumana	<i>Fumana procumbens</i>	Cistaceae
bedstraw	<i>Galium oelandicum</i>	Rubiaceae
common globulria	<i>Globularia vulgaris</i>	Globulariaceae
fastigate gypsophila	<i>Gypsophila fastigiata</i>	Caryophyllaceae
Öland rockrose	<i>Helianthemum oelandicum</i>	Cistaceae
juniper	<i>Juniperus communis</i>	Cupressaceae
hairy melick	<i>Melica ciliata</i>	Poaceae
conquefoil	<i>Potentilla fruticosa</i>	Rosaceae
blackthorn	<i>Prunus spinosa</i>	Rosaceae
dog rose	<i>Rosa canina</i>	Rosaceae
blue moor grass	<i>Sesleria caerulea</i>	Poaceae
campion	<i>Silene uniflora</i> ssp. <i>petraea</i>	Caryophyllaceae
wild thyme	<i>Thymus serpyllum</i>	Lamiaceae
common vincetoxicum	<i>Vincetoxicum hirundinaria</i>	Asclepiadaceae
hairy violet	<i>Viola hirta</i>	Violaceae
Teesdale violet	<i>Viola rupestris</i>	Violaceae

lichens:

*Cetraria aculeata*  
*Cetraria nivalis*

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*Cladonia symphycarpa*  
*Pelthigera rufescens*  
*Thamnolia vermicularis*

mosses:

*Ctenidium molluscum*  
*Ditrichum flexicaule*  
*Fissidens cristatus*  
*Riccia* spp.  
*Tortella tortuosa*

### **Karst alvar**

The karst alvar is an extreme environment with deep, open fissures and soil-free limestone rock surfaces. Soil accumulates in the bottom of the fissure and remains fresh to moist. The environment is sheltered from wind, strong solar irradiation and grazing. The favourable and consistent micro climate of the fissures contains several broadleaf species which would otherwise not survive on the dry alvar. Snails (*Balea perversa*, *Chondrina clienta*) eat up the algae in the lichens round the fissures, leaving the limestone rock surface bare. Basic soil reaction.

St Bernard's lily	<i>Allium lineare</i>	Liliaceae
wall-rue	<i>Anthericum liliago</i>	Liliaceae
maidenhair spleenwort	<i>Asplenium ruta-muraria</i>	Aspleniaceae
wild cotoneaster	<i>Asplenium trichomanes</i>	Aspleniaceae
heptica	<i>Cotoneaster integerrimus</i>	Rosaceae
scorpion senna	<i>Hepatica nobilis</i>	Ranunculaceae
wall lettuce	<i>Hippocrepis emerus</i>	Fabaceae
buckthorn	<i>Mycelis muralis</i>	Asteraceae
dog rose	<i>Rhamnus catharticus</i>	Rhamnaceae
mosses:	<i>Rosa canina</i>	Rosaceae

*Anomodon* spp.  
*Hypnum vaucheri*  
*Conocephalum conicum*  
*Ctenidium molluscum*  
*Distichum capillaceum*  
*Encalypta streptocarpa*  
*Eurhynchium striulatulum*  
*Fissidens taxifolius*  
*Homalothecium sericeum*  
*Myurella julacea*  
*Plagiomnium* spp.  
*Pseudoleskeella catenulata*

### **Alvar temporary pool ("våt")**

Alvar temporary pools is the name given to the intermittently water-filled declivities occurring here and there on the alvar. The vegetation cover is sparse and usually the pools are completely dried out in summer. "Brown mosses" and a few vascular plants grow in the dry, mostly thin micrite. Basic soil reaction, soil depth 0 – 20 cm.

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creeping bent	<i>Agrostis stolonifera</i>	Poaceae
marsh foxtail	<i>Alopecurus geniculatus</i>	Poaceae
lesser water plantain	<i>Baldellia ranunculoides</i>	Ranunculaceae
slender spike-rush	<i>Eleocharis uniglumis</i> ssp. <i>sternerii</i>	Cyperaceae
meadow inula	<i>Inula britannica</i>	Asteraceae
Irish fleabane	<i>Inula salicina</i>	Asteraceae
jointed rush	<i>Juncus articulatus</i>	Juncaceae
shore weed	<i>Plantago (Littorella) uniflora</i>	Plantaginaceae
corn mint	<i>Mentha arvensis</i>	Lamiaceae
mouse-tail	<i>Myosurus minimus</i>	Ranunculaceae
plantain	<i>Plantago tenuiflora</i>	Plantaginaceae
knotted pearlwort	<i>Sagina nodosa</i>	Caryophyllaceae
water germander	<i>Teucrium scordium</i>	Lamiaceae
<b>mosses:</b>		
	<i>Brachythecium turgidum</i>	
	<i>Bryum neodamense</i>	
	<i>Bryum pseudotriquetrum</i>	
	<i>Campylium elodes</i>	
	<i>Campylium stellatum</i>	
	<i>Drepanocladus sendtneri</i>	
	<i>Pseudocalligeron lycopodioides</i>	
	<i>Pseudocalligeron turgescens</i>	
	<i>Riccia canaliculata</i>	
	<i>Scorpidium revolvens</i>	
	<i>Scorpidium scorpioides</i>	

**Alvar lake**

*Alvar lakes* form in larger declivities where there is water all the year round, and are seldom more than a metre in depth. Locally they are called bogs or swamps. Common reed, water horsetail, tufted sedge and grey club-rush frequently occur in the middle of the lake, surrounded by a free water zone rich in aquatic plants.

narrow-leaved water-plantain	<i>Alisma lanceolatum</i>	Alismataceae
lesser water-plantain	<i>Baldellia ranunculoides</i>	Ranunculaceae
tufted sedge	<i>Carex elata</i>	Cyperaceae
stoneworts	<i>Chara</i> spp.	Charales
great fen sedge	<i>Cladium mariscus</i>	Cyperaceae
water horsetail	<i>Equisetum fluviatile</i>	Equisetaceae
floating marsh wort	<i>Helosciadium inundatum</i>	Apiaceae
marsh pennywort	<i>Hydrocotyle vulgaris</i>	Apiaceae
shore weed	<i>Plantago (Littorella) uniflora</i>	Plantaginaceae
water mint	<i>Mentha aquatica</i>	Lamiaceae
bogbean	<i>Menyanthes trifoliata</i>	Menyanthaceae
common reed	<i>Phragmites australis</i>	Poaceae
pondweed species	<i>Potamogeton</i> spp.	Potamogetonaceae
willow species	<i>Salix</i> spp.	Salicaceae
grey club-rush	<i>Scirpus lacustris</i> ssp. <i>tabernaemontani</i>	Cyperaceae



## Species that are endemic, disjunct or at the edge of their distribution in Öland

Species included in the European Commission Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora and the European Commission Directive on the Conservation of Wild Birds are marked \*\*.

### *Species with arctic/alpine distribution (glacial relics)*

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#### vascular plants:

green spleenwort	<i>Asplenium viride</i>
hoary whitlow grass	<i>Draba incana</i>
Alpine catchfly	<i>Lychnis alpina</i>
Alpine meadow grass	<i>Poa alpina</i>
spring cinquefoil	<i>Potentilla cranzii</i>
Alpine Woodsia	<i>Woodsia alpina</i>

#### lichens:

<i>Caloplaca decipiens</i>
<i>Cetraria cucullata</i>
<i>Cetraria nivalis</i>
<i>Farnoldia hypocrita</i>
<i>Megaspora verrucosa</i>
<i>Solorina spongiosa</i>
<i>Thamnolia vermicularis</i>

#### mosses:

<i>Encalypta mutica</i> **
<i>Hypnum bambergeri</i>
<i>Mannia pilosa</i>
<i>Rhytidium rugosum</i>
<i>Pseudocalligeron turgescens</i>
<i>Seligeria oelandica</i>

#### fungi:

<i>Calvatia cretacea</i>
<i>Clitocybe breasdoliana</i>

#### insects:

Coleoptera	<i>Helophorus lapponicus</i>
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#### birds:

barnacle goose	<i>Branta leucopsis</i> **
golden plover	<i>Pluvialis apricaria</i> **

### *Species with circumpolar distribution*

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#### vascular plants

rock sedge	<i>Carex obtusata</i>
shrubby cinquefoil	<i>Potentilla (Dasiphora) fruticosa</i>

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**insects:**

Lepidoptera	<i>Acleris variegana</i>
Lepidoptera	<i>Coleophora peri</i>
Heteroptera	<i>Ligyrocoris silvestris</i>

***Species with southwestern distribution***

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**vascular plants:**

lesser water-plantain	<i>Baldellia ranunculoides</i>
common globularia	<i>Globularia vulgaris</i>
shore weed	<i>Plantago (Litorella) uniflora</i>
sweet alison	<i>Teesdalia nudicaulis</i>

**lichens:**

*Caloplaca glomerata*

**mosses:**

*Eurhynchium speciosum*  
*Phascum curvicolle*  
*Pottia bryoides*

**insects:**

Lepidoptera *Cnephasia genitalana*

**molluscs:**

*Chondrina clienta*

***Species with southern distribution***

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**vascular plants:**

St Bernard's lily	<i>Anthericum liliago</i>
St Bernard's lily	<i>Anthericum ramosum</i>
dense silky-bent	<i>Apera interrupta</i>
common fumana	<i>Fumana procumbens</i>
scorpion senna	<i>Hippocrepis emerus</i>
Hutchinsia	<i>Hornungia petraea</i>
thyme broomrape	<i>Orobanche alba</i>
proliferous pink	<i>Petrorhagia prolifera</i>
thale cress	<i>Sisymbrium supinum**</i>
breckland speedwell	<i>Veronica praecox</i>

**lichens**

*Acarospora cervina*  
*Aspicilia coronata*  
*Fulgensia fulgens*  
*Fulgensia schistidii*  
*Heppia lutosa*  
*Rinodina calcarea*  
*Psora decipiens*  
*Psora testacea*  
*Psora vallesiaca*

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*Solorina spongiosa*  
*Squamarina cartilaginea*  
*Staurothele caesia*  
*Verrucaria fuscula*

**mosses:**

*Entosthodon muehlenbergii*  
*Eurhynchium striatulum*  
*Grimmia tergestina*  
*Mannia fragrans*  
*Riccia ciliifera*  
*Riccia huebeneriana*  
*Riccia subbifurca*

**fungi:**

*Hygrophorus arbustivus*  
*Entoloma exentricum*  
*Lycoperdon decipiens*  
*Poronia punctata*

**insects:**

Lepidoptera *Sparganothis pilleriana*  
blue-winged grasshopper *Sphingonotus coerulans*

**amphibians:**

āgile frog *Rana dalmatina*

***Species with southeastern distribution***

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**vascular plants:**

pasque flower *Allium lineare*  
dyer's woodruff *Anemone pratensis*  
fastigiata gypsophila *Asperula tinctoria*  
goldilocks *Gypsophila fastigiata*  
plantain *Linosyris vulgaris (Aster linosyris)*  
tufted milkwort *Plantago tenuiflora*  
large self-heal *Polygala comosa*  
hairy buttercup *Prunella grandiflora*  
common vincetoxicum *Ranunculus illyricus*  
meadow violet *Vincetoxicum hirundinaria*  
*Viola pumila*

**mosses:**

*Didymodon sinuosus*

**insects:**

Lepidoptera *Apterona crenulella*  
Coleoptera *Calosoma reticulatum*  
Lepidoptera *Coleophora kyffhusana*  
Cecidomyiidae (Diptera) *Contarinia vincetoxici*  
Lepidoptera *Carycolum petryi*  
Cecidomyiidae (Diptera) *Dasineura pulsatillae*

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Lepidoptera	<i>Fedalmia headleyella</i>
Lepidoptera	<i>Hadena irregularis</i>
Heteroptera (Hemiptera)	<i>Lygaeus equestris</i>
Lepidoptera	<i>Setina roscida</i>
Heteroptera (Hemiptera)	<i>Xylocoris thomsoni</i>
<b>birds:</b>	
collared flycatcher	<i>Ficedula albicollis**</i>
golden oriole	<i>Oriolus oriolus</i>

***Species with Continental/Siberian distribution***

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**vascular plants:**

	<i>Artemisia rupestris</i>
yellow milk-vetch	<i>Oxytropis campestris</i>

**mosses:**

*Anomodon* spp.

**insects:**

	<i>Bryodema tuberculata</i>
Heteroptera (Hemiptera)	<i>Coriomeris denticulatus</i>
	<i>Omocestus haemorrhoidalis</i>
Heteroptera (Hemiptera)	<i>Pinosomus trichopterus</i>

**birds:**

rose finch	<i>Carpodacus erythrinus</i>
black tern	<i>Chlidonias niger**</i>
Montagu's harrier	<i>Circus pygargus**</i>
red-breasted flycatcher	<i>Ficedula parva**</i>
black-tailed godwit	<i>Limosa limosa</i>
nightingale	<i>Luscinia luscinia</i>
greenish warbler	<i>Phylloscopus trochiloides</i>
barred warbler	<i>Sylvia nisoria**</i>

***Species only found in Öland within the Nordic area***

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**vascular plants:**

	<i>Allium lineare</i>
plantain	<i>Plantago tenuiflora</i>
hairy buttercup	<i>Ranunculus illyricus</i>
	<i>Viola elatior</i>

**insects:**

Coleoptera	<i>Cryptocephalus elongatus</i>
Lepidoptera	<i>Elachista festucicolella</i>
Lepidoptera	<i>Margaritia manualis</i>

### ***Taxa endemic to Öland***

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**vascular plants:**

	<i>Artemisia oelandica</i> **
	<i>Galium oelandicum</i>
Öland rockrose	<i>Helianthemum</i> var. <i>oelandicum</i>
	<i>Helianthemum</i> var. <i>canescens</i>
Alpine catchfly	<i>Lychnis alpina</i> var. <i>oelandica</i>
<b>insects:</b>	
Lepidoptera	<i>Bucculatrix laciniatella</i>
Lepidoptera	<i>Coleophora peri</i>

### ***Taxa endemic to Öland and Gotland***

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**vascular plants:**

	<i>Allium schoenoprasum</i> var. <i>alvarensense</i>
	<i>Crepis tectorum</i> ssp. <i>pumila</i>
	<i>Festuca rubra</i> ssp. <i>oelandica</i>
	<i>Primula farinosa</i> var. <i>acaulis</i> (Ahlquist)
	<i>Senecio jacobaea</i> ssp. <i>gotlandicus</i> **
	<i>Silene uniflora</i> ssp. <i>petraea</i>
	<i>Eleocharis uniglumis</i> ssp. <i>sternerii</i>
<b>lichens:</b>	
	<i>Lempholemma degelianum</i>
<b>mosses:</b>	
	<i>Riccia gothica</i> (also found in Västergötland, Sweden)
<b>insects:</b>	
Brachycera (Diptera)	<i>Scellus dolichocerus</i>
Coleoptera	<i>Sibinia phalerata</i>

Cultural Monuments (etc.) Act (1988:950) with  
Amendments up to and including SFS 1996:529

Cultural Monuments Ordinance (1988:1188) with  
Amendments up to and including SFS 1995:1448

# The Environmental Code

*A summary of the Government  
Bill on the Environmental Code  
(1997-98:45)*



REGERINGSKANSLIET

PBL

Boverket 1997  
English version



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# THE SWEDISH PLANNING AND BUILDING ACT (1987:210), PBL. (Including amendments up to February 1997)

## Part 1. Introductory regulations

Section 1: This Act contains regulations about the planning of land and water areas as well as building. The purpose of these regulations is, with due regard to the freedom of the individual, to encourage the development of an egalitarian society as well as good, long-term and sustainable living conditions for people today and for future generations. *Act (1993:419)*

Section 2: It is a municipal responsibility to plan the use of land and water areas.

Section 3: Each municipality shall draft an up-to-date *comprehensive plan* covering the whole of the municipality's area. The comprehensive plan shall indicate the main ways in which land and water areas are to be utilised and how physical development shall take place. The municipal comprehensive plan is not binding either on authorities or individuals.

The control of land use and of development within a municipality takes place through *detailed development plans*. A detailed development plan may only cover a limited part of a municipality.

For limited areas of a municipality not covered by a detailed development plan, *area regulations* may be adopted if they are required to achieve the purpose of the comprehensive plan or to ensure the safeguarding of national interests in accordance with the Act (1987:12) on the Management of Natural Resources, etc.

*Property regulation plans* may be adopted in order to facilitate the implementation of detailed development plans.

For the co-ordination of several municipalities' planning, *regional plans* may be adopted. *Act (1995:1197)*

Section 4: For the construction or demolition of buildings as well as for the excavation or filling of a site, or the felling or planting of trees, a permit in the form of either a *building permit*, *demolition permit* or a *site improvement permit* is required in accordance with this Act. In addition, the Committees referred to in section 7 shall be informed about the various projects involved by means of a *building notification* or a *demolition notification* to the extent required by this Act.

With regard to measures requiring a building permit, a *tentative approval* may be issued, indicating to what extent development on the site in question may be permitted. *Act (1995:1197)*

Section 5: When issues are scrutinised in accordance with this Act, consideration shall be given to both public and private interests unless otherwise prescribed.

Section 6: If land is to be used for development, then it should be suitable for this purpose from the public's point of view. Assessments of suitability form part of the process of drafting plans or matters concerning the issuing of building permits or tentative approvals.

Section 7: In each municipality there shall be at least one Committee responsible for the municipality's tasks concerning building and development issues and having primary responsibility for the supervision of building activities.

What is stated in this Act regarding the Building Committee shall apply to any Committee appointed in accordance with the first paragraph. *Act (1991:1704)*

**Section 8:** The County Administrative Board shall be responsible for the supervision of planning and building activities in its county and shall co-operate with the municipalities in their planning work.

The Swedish National Board of Housing, Building and Planning has general responsibility for the supervision of planning and building activities throughout Sweden. *Act (1990:1365)*

**Section 9:** Special regulations covering the technical qualities of buildings and other installations as well as building products can be found in the Act (1994:847) on the Technical Qualities of Buildings, etc. *Act (1994:852)*

## **Part 2. General interests to taken be into consideration in planning work and the siting of development etc**

**Section 1:** Land and water areas shall be used for that or those purposes for which the areas are most suited with regard to their nature and location as well as actual needs.

When drafting plans and in matters concerning a building permit and tentative approval then the Act (1987:12) on the Management of Natural Resources, etc., shall be applied. *Act (1995:1197)*

**Section 2:** Planning shall, taking into consideration natural and cultural values, encourage the appropriate structure of development, of green areas, of transportation routes and other utilities. From a social viewpoint, a good environment and, moreover, good environmental conditions in general, include the encouragement of the good long-term management of land and water resources as well as energy and raw materials. Consideration shall also be given to conditions in adjacent municipalities.

What has been specified in the first paragraph shall also be taken into consideration when dealing with other matters under this Act. *Act (1995:1197)*

**Section 3:** Development shall be located on land which is suitable for the purpose with regard to:

1. the health of residents and others,
2. soil, rock and water conditions,
3. provisions allowing vehicular service, water supply and sewerage as well as other communal services and
4. provisions for preventing water and air pollution as well as disturbance by noise.

Buildings and other developments requiring energy shall be sited in a manner that is conducive to energy provision and management. *Act (1989:515)*

**Section 4:** In areas of built-up development, the environment shall be designed with regard to the need for:

1. protection against the occurrence and spread of fire as well as against traffic and other accidents,
2. protection with regard to civil defence
3. water and energy conservation as well as a healthy indoor climate and hygienic conditions,
4. traffic provision and a good traffic environment,
5. parks and other green areas,

6. provisions enabling persons with impaired mobility or orientation capacity to use the area, and

7. future changes and extensions.

Within, or close to areas of built-up development there shall be suitable areas for play, exercise and other outdoor activity as well as the provision of reasonable levels of communal and commercial services. *Act (1995:1197)*

### Part 3. Requirements for buildings, etc.

#### New Buildings

Section 1: Buildings shall be sited and designed in a way that is suitable with regard to the townscape or rural environment and to the natural and historical values inherent in those places. The external form and colour of buildings should be suitable with regard to the building itself and provide a good overall impact.

Section 2: Buildings shall be sited and designed so that they, or their intended use, shall not have a deleterious impact on traffic safety or in other ways create dangers or serious disturbances to their surroundings. Impact on ground water, which may be deleterious to surroundings, should be avoided. With regard to buildings sited underground, reasonable consideration shall be given to ensuring that the use of land above these buildings is not made more difficult.

#### Buildings

Section 3: Buildings shall meet the requirements given in section 2 of the Act (1994:847) on the Technical Qualities of Buildings, etc. to the extent indicated by the regulations issued in accordance with section 21 of that Act. *Act (1994:852)*

Section 4: *Repealed by Act (1994:852)*

Section 5: *Repealed by Act (1994:852)*

Section 6: *Repealed by Act (1994:852)*

Section 7: *Repealed by Act (1994:852)*

Section 8: *Repealed by Act (1994:852)*

Section 9: *Repealed by Act (1994:852)*

Section 10: Alterations to a building shall be carried out with care thus paying attention to distinctive features as well as to constructional, historical, cultural, environmental and architectural values. *Act (1994:852)*

Section 11: With regard to building measures which do not require planning permission, then Sections 1, 2 and 10 shall be applied to the extent warranted by the nature and extent of the measures involved. *Act (1994:852)*

**Section 12:** Buildings which are particularly valuable from a historical, cultural, environmental or architectural point of view, or which form part of such development, shall not be allowed to deteriorate.

**Section 13:** The exteriors of buildings shall be kept in good condition. Maintenance shall be adapted to the value of the building as seen from a historical, cultural, environmental and architectural point of view as well as to the character of the immediate surroundings.

The buildings referred to in Section 12 shall be maintained so that their distinctive features are protected. *Act (1994:852)*

#### **Installations other than buildings**

**Section 14:** With regard to installations referred to in Part 8, Section 2, first paragraph, the regulations in Sections 1-3 and 10-13 concerning buildings will apply.

With regard to signs and illuminated installations for which a building permit is required, the regulations in Sections 1 and 2 shall be applied. *Act (1995:1197)*

#### **Sites, public spaces, etc.**

**Section 15:** Sites for development shall be used in a way that is suitable with regard to the natural landscape or townscape as well as to the natural and historical value of such sites. In addition, efforts shall be made to ensure that:

1. natural conditions are preserved as far as possible,
2. surrounding areas are not subject to disturbances,
3. the risk of accidents is limited and that serious disturbances to traffic do not occur,
4. there is a suitably located entrance or other exit from the site and that provisions for vehicular traffic meet requirements with regard to accessibility for emergency vehicles to and from the buildings on the site,
5. the site, unless prevented by the terrain or other conditions, can be used by persons with impaired mobility or orientation capacity, and
6. reasonable space for parking, loading and unloading of vehicles is arranged on site or nearby.

If sites are to be occupied by buildings which contain one or more dwellings or premises for pre-school, school or other similar facilities, then sufficient open space shall be provided for play and outdoor recreation either on the site or on areas close to it.

If sufficient space is not available for parking and outdoor recreation areas, then priority shall be given to the provision of outdoor recreation areas.

**Section 16:** On developed sites, the regulations in Section 15, first paragraph, item 6 as well as the second and third paragraphs shall apply within reasonable limits.

For alterations to a building for which a building permit is required, the site shall be arranged so that it meets the requirements of Section 15 to the extent and within the limits regarding work costs and the site's particular qualities. *Act (1994:852)*

**Section 17:** Sites shall, irrespective of whether they are used for development or not, be kept tidy. They shall be maintained so that no disturbances are created to the surroundings or to traffic and so that the risk of accidents is reduced. The Building Committee can decide that tree-planting be carried out and that existing vegetation be preserved.



Sites which are of particular value from a historical, cultural, environmental or architectural point of view shall not be disfigured and regard shall be given to the fact that they are covered by protective regulations in a detailed development plan or area regulations.

Installations which have come about in order to meet the requirements of Section 15 shall be reasonably maintained.

Play areas and fixed installations in play areas shall be maintained so that the risk of accidents is reduced. *Act (1995:1197)*

Section 18: With regard to public spaces and areas for installations other than buildings, the regulations in Section 17, second paragraph shall always apply as well as those in Sections 15 and 16, and the first, third and fourth paragraphs of Section 17 shall apply within reasonable limits. *Act (1995:1197)*

## Part 4: The Comprehensive Plan

Section 1: The municipal comprehensive plan shall include the general interests specified in Part 2 and the environmental and risk factors that should be taken into consideration in decisions concerning the use of land and water areas. When providing for the general interests, the national interests according to the Act (1987:12) on the Management of Natural Resources, etc. should be given special attention.

The plan shall indicate:

1. the main points concerning the intended use of land and water areas,
2. the municipality's views concerning how the built environment is to be developed and preserved and
3. how the municipality intends to meet the current national interests according to the Act on the Management of Natural Resources etc.

The significance and consequences of the comprehensive plan should be explained in such a way that they can be understood without difficulty. *Act (1995:1197)*

Section 2: There shall be attached to the comprehensive plan a written report as specified in Section 8 as well as the County Administrative Board's evaluation report according to Section 9.

If the County Administrative Board has not approved of a certain part of the plan, this area shall be denoted in the plan. *Act (1995:1197)*

Section 3: When a first draft of the comprehensive plan, or revisions to it are made, the municipality shall consult the County Administrative Board and any regional planning body as well as any other municipality that may be affected by the plan. Other authorities as well as associations and individuals having a considerable interest in the proposals contained in the plan shall also be given an opportunity to participate in the consultations. *Act (1995:1197)*

Section 4: The purpose of consultation is the improvement of the data upon which decisions are made as well as the provision of opportunities for insight and influence. During consultation, the reasons for the proposals, important planning data supporting them and the impact of the proposals shall be explained.

The results of consultations, and the amendments which arise as a result of the views expressed, shall be presented in a separate consultation report. *Act (1995:1197)*

Section 5: During consultations, the County Administrative Board shall in particular take into consideration and co-ordinate national interests and in that connection shall:

1. provide data for municipal evaluations and give advice in matters concerning national interests in accordance with Part 2 and also the environmental and risk factors that should be considered in decisions about the use of land and water areas,
2. work to satisfy the national interests specified in the Act (1987:12) on the Management of Natural Resources etc., and suitably co-ordinate issues concerning the use of land and water areas affecting two or more municipalities. *Act (1995:1197)*

Section 6: Before a comprehensive plan, or an amendment to such a plan, can be adopted, the municipality shall publicly exhibit the proposals during a period of at least two months. Those wishing to make representations about the proposals shall do this in writing during the public inspection period.

Section 7: Public notice about opportunities for the inspection of the planning proposals must be given at least one week prior to the commencement of the inspection period and be displayed on the municipality's notice-board as well as inserted in the local newspaper. The public notices must indicate where and during which period the proposals are exhibited, and in what way, and to whom, representations shall be made. If the planning proposals concern only a part of the municipality, this must be stated in the public notices.

With regard to the public notices, the provisions included in the Act (1977:654) concerning Public Notices about Cases and Matters before Public Bodies, etc. shall be followed.

One copy of the planning proposals, together with the written report and the consultation report shall, prior to the public exhibition of the proposals, be submitted to the County Administrative Board as well as to any regional planning body and other municipalities affected by the proposals.

Section 8: During the public inspection period the planning proposals shall be accompanied by:

1. the written report required under the second paragraph,
2. the consultation report,
3. the current municipal comprehensive plan, and
4. any planning data which the municipality regards of importance when assessing the proposals.

The written report shall include information about planning conditions, the reasons for the design of the proposals and the measures which the municipality intends to take in order to implement the plan. Further, the proposals shall describe the plan's consequences.

Should the proposals involve the amendment of a comprehensive plan for a part of the municipality, then the consequences of these proposals on other parts of the municipality shall be described. *Act (1995:1197)*

Section 9: The County Administrative Board shall, during the public inspection period, document its scrutiny of the planning proposals.

This document shall state:

1. whether the proposals meet the national interests in accordance with the Act (1987:12) on the Management of Natural Resources, etc.
2. whether matters concerning the use of land and water areas which affect two or more municipalities are suitably co-ordinated, and
3. whether any development is unsuitable with regard to the health of residents and others or with regard to the need to protect against accidents.

Section 10: After the public inspection period, the municipality shall assemble all the comments received and present its subsequent proposals in a statement which shall accompany the documents referring to this matter.

If the proposals undergo substantial amendment following the public inspection period, then a new period of public inspection shall follow.

Section 11: A municipal comprehensive plan, or amendments to it, shall be adopted by the municipal council.

Section 12: A decision to adopt or amend a municipal comprehensive plan becomes valid when the decision has gained legal force.

Section 13: When the municipality's decision to adopt or amend the comprehensive plan has become legally effective, the plan, the written report, the consultation report, the scrutiny document, the municipality's statement in accordance with Section 10 and a copy of the minutes recording the municipality's decision shall, without delay, be submitted to the National Board of Housing, Building and Planning, the County Administrative Board and any regional planning board or municipalities which are affected. *Act (1990:1365)*

Section 14: The municipal council shall, at least once during its term of office, consider whether the comprehensive plan is still up-to-date.  
Before a decision is made in accordance with the first paragraph, the County Administrative Board must, in a summarised statement, give its views regarding national interests that may be of importance to the municipality's decision as well as describe how the County Administrative Board's views relate to the comprehensive plan. *Act (1995:1197)*

## Part 5. The detailed development plan and area regulations

### Detailed development plan

Section 1: The examination of a site's suitability for development and the control of the design of the built environment is carried out in a detailed development plan for:

1. new continuous development,
2. new individual buildings, the use of which will have a significant impact on surroundings or which are to be located in an area where a considerable demand exists for building sites, or where examination of the proposed building cannot be carried out in connection with the scrutiny of a building permit or tentative approval application; and
3. development which is going to be altered or preserved if comprehensive control is required.

The first paragraph shall also apply to installations other than buildings where these require a building permit in accordance with Part 8, Section 2.

A detailed development plan does not need to be drafted if sufficient planning controls exist in the area regulations.

Section 2: In the drafting of a detailed development plan reasonable consideration shall be given to the existing development, ownership and property conditions which may have an impact on the implementation of the plan.

Those parts of the plan which involve land, or particular rights to land, being acquired in accordance with Part 6, Sections 17 - 19, shall be designed so that their advantages outweigh the inconvenience suffered by individuals.

A detailed development plan shall not cover an area larger than is required for the purposes of the plan and the time-limit during which it shall be implemented as specified in Section 5.

**Section 3:** The detailed development plan shall indicate the areas and boundaries of:

1. public areas such as streets, roads, squares and parks,
2. areas for buildings, sport and recreational facilities, burial grounds, installations for vehicular traffic, water supply, sewerage and energy provision as well as all protection and safety areas, and
3. water areas for, inter alia, small boat harbours and outdoor swimming.

With regard to public spaces for which the municipality is responsible, their use and design shall be indicated. The use of development sites and water areas shall also be indicated.

**Section 4:** If the municipality is not responsible for the public spaces indicated, then this shall be noted in the detailed development plan.

**Section 5:** The detailed development plan shall contain a time-limit for development. This limit shall be determined in such a way that there is a reasonable chance of the plan's implementation taking place within at least five and at most fifteen years. The time is calculated from the date when the decision to adopt the plan gained legal force or from the date when some part of the plan can be implemented as a result of a directive according to Part 13, Section 8, second paragraph. The plan can also indicate that the time-limit is to be calculated from a later date than when the decision to adopt the plan gained legal force. Different time-limits can be stipulated for different areas within the plan.

If the plan does not contain any stipulations about time-limits, the time-limit will be fifteen years from the date indicated in the first paragraph.

Regulations on the renewal and extension of the time-limit, are contained in Section 14.

When the time-limit expires, the plan will continue to be valid until it is amended or annulled.

**Section 6:** If the detailed development plan permits the temporary use of land or buildings in accordance with Section 7, first paragraph, item 9, the plan shall indicate during which period the temporary use is permitted. The time-limit should be a maximum of ten years and should be calculated from the date indicated in Section 5, first paragraph. If the plan is silent about the time-limit, then it will be five years. Regulations on the extension of the time-limit are contained in Section 15.

**Section 7:** In addition to what is stipulated in Section 3 on the contents of the plan, regulations can also cover:

1. to what extent measures require a building permit in accordance with Part 8, Section 5, first paragraph; Section 6, first paragraph, items 2 and 3, second and third paragraphs, item 2; Section 8, first and third paragraphs and Section 9, first and second paragraphs,
2. details about the greatest extent to which development above and below ground level is permitted and, if there are special reasons with regard to housing provision or the environment, the minimum extent to which development is permitted,
3. the use of buildings which, with regard to residential development includes regulations concerning the percentage of different types of dwelling of varying types and size,

4. the siting, design and construction of buildings, other installations and sites, including the regulations concerning the care of buildings specified in Part 3, Section 10, the protective regulations concerning buildings specified in Part 3, Section 12 and for sites that are particularly valuable from a historical, cultural, environmental or architectural point of view, the prohibition on the demolition of buildings referred to in Part 3, Section 12 as well as the regulations covering other alterations to buildings apart from extensions which may be carried out according to the regulations in Section 21 of the Act (1994:847) concerning the Technical Qualities of Buildings, etc.,
5. the design and height of vegetation and ground surfaces,
6. the use and design of public spaces for which the municipality is not responsible, including protective regulations for places of particular value from a historical, cultural, environmental or architectural point of view,
7. fences as well as exits from and entrances onto public spaces,
8. the siting and design of parking spaces, the prohibition on using land or buildings for parking, as well as the responsibility for providing space for parking, loading and unloading in accordance with Part 3, Section 15, first paragraph, item 6,
9. the temporary use of land or buildings not immediately required for the purposes indicated in the plan
10. reserves of land for public utilities, energy installations as well as traffic and road installations,
11. protective installations to prevent disturbances from surroundings and, if there are special reasons, the highest permitted figures for disturbances due to air pollution, noise, vibration, light or any other disturbance which is subject to scrutiny in accordance with the Environment Protection Act (1969:387),
12. the principles concerning the subdivision of property and the establishment of communal facilities,
13. protection of such public areas which are the responsibility of the municipality and which are particularly valuable from a historical, cultural, environmental or architectural point of view.

Regulations concerning the use of a building according to the first paragraph, item 3, shall not be formulated in such a way as to prohibit effective competition.

A detailed development plan may also include regulations about joint development in accordance with Part 6, Section 2. If a detailed development plan is adopted after a development decision reached in accordance with the Act (1987:11) on Joint Development has become legally effective, it shall be indicated in the plan whether implementation is to proceed according to that Act. If land, belonging to any property whose owner is not involved in the joint development, is to be utilised then details about this shall be included in the plan.

The plan should not be more detailed than is required for its purpose. Regulations which concern opportunities to carry on retail trading shall only be permitted if there are serious reasons. *Act (1996:1315)*

**Section 8:** A detailed development plan may indicate that a building permit may not be issued for measures involving a substantial change in land use until:

1. certain traffic, water supply, sewerage or energy installations, for which the municipality is not responsible, have been carried out,
2. certain buildings or installations on a site have been demolished, modernised or have been accorded a new use in the plan, or the entrance or exit from a property has been changed or

3. a decision to adopt the property regulation plan contained in the detailed development plan has become legally effective, or the property regulation plan can be implemented in accordance with a directive issued in accordance with Part 13, Section 8, second paragraph.

**Section 9:** A detailed development plan consists of a map and a special document containing regulations. However, the plan may contain only one of these documents or both a map and regulations, provided the plan's contents are still completely clear.

The map shall indicate how the planning area is subdivided for different land use purposes and which regulations pertain to the different areas.

The planning document shall be formulated in a way that makes clear how the proposals affect the environment. *Act (1989:1049)*

**Section 10:** The detailed development plan shall be accompanied by a report of plan in accordance with Section 26 as well as an implementation report in accordance with Part 6, Section 1. If the detailed development plan contains only one document, then the report of plan should be included. *Act (1989:1049)*

**Section 11:** Before the elapse of the time-limit for development, and contrary to the wishes of the property-owners concerned, a detailed development plan may be amended or annulled but solely when this is required as a result of new conditions of great public importance which could not be foreseen when the plan was drafted.

When the time-limit for development has elapsed, the plan may be amended or annulled without regard to the development rights which might have accrued during the plan's existence.

The extension or renewal of the time-limit for development is provided for in Section 14. Regulations for the extension of the time-limit concerning the temporary use of land are contained in Section 15.

**Section 12:** The regulations contained in Sections 1 - 4 and 6 - 10 also apply when a detailed development plan is amended or annulled.

When a detailed development plan is amended, the time-limit for implementation stated in the plan shall also be valid for the issues covered by the amended plan. If the amendment of the plan does not affect the time-limit for implementation of the plan, then a special time-limit shall be determined according to Section 5 and for the issues referred to in the amended plan. *Act (1991:604)*

**Section 13:** If a detailed development plan is altered or is wholly, or partly, annulled for an area covered by a property regulation plan, then the detailed development plan shall indicate which parts of the property regulation plan specified in accordance with Part 6, Section 11, are no longer valid.

The alteration of a detailed development plan as a result of a property regulation plan being adopted, is dealt with in Part 6, Section 5.

**Section 14:** Before the time-limit for development has expired, it can be extended by a maximum of five years at a time. After the expiry of the time-limit, it can be renewed for a maximum of five years at a time. Such extension and renewal can refer to a particular area within the plan.

If measures have been taken during the implementation time-limit with regard to a particular property, but these measures have not been fully implemented because of circumstances over which the municipality has no control, the time-limit for implementation

shall be extended, within reasonable limits, for that particular property. An application for extension shall be submitted before the time-limit for implementation expires.

**Section 15:** The period during which the temporary use of land is permitted can be extended by a maximum of five years at a time. However, the total permitted period shall not exceed twenty years.

#### Area regulations

**Section 16:** For defined areas, not covered by a detailed development plan, regulations can be adopted in order to ensure that the intentions of the comprehensive plan are achieved or that a national interest, in accordance with the Act (1987:12) on the Management of Natural Resources, etc., is met. Area regulations may be used to control:

1. to what extent measures require permission in accordance with Part 8, Section 5, first paragraph; Section 6, first paragraph, items 1 and 3 and the second and third paragraphs; Section 7; Section 8, second and third paragraphs and Section 9, third paragraph,
2. the main features of the use of land and water areas for development or for leisure facilities, transportation routes and other comparable land uses,
3. the maximum permitted building coverage or usable floor area of holiday cottages and the size of plots for such cottages,
4. the siting, design and construction of buildings, other installations or sites including the regulations concerning the care of buildings are specified in Part 3, Section 10, the protective regulations concerning buildings specified in Part 3, Section 12, and for sites that are particularly valuable from a historical, cultural, environmental or architectural point of view, the prohibition on the demolition of buildings as noted in Part 13, Section 12, as well as those regulations covering other alterations to buildings apart from extensions that may be carried out according to the regulations in Section 21 of the Act (1994:847) on the Technical Qualities of Buildings, etc.,
5. the use and design of public open spaces, including protective regulations for places of particular value from a historical, cultural, environmental or architectural point of view,
6. vegetation and the design and height of land in such areas referred to in Part 8, Section 9, third paragraph,
7. protective arrangements to prevent disturbance from surroundings and
8. joint development in accordance with Part 6, Section 2. *Act (1995:1197)*

**Section 17:** The area regulations and the reasons for them shall be described in a special document. This document shall be arranged so that it clearly describes how the regulations affect the environment.

The above paragraph shall also be followed when area regulations are amended or annulled.

#### Procedures, etc.

**Section 18:** A detailed development plan shall be based on a programme indicating the starting point and objectives of the plan, if this is essential.

An environmental impact assessment in accordance with Part 5 of the Act (1987:12) on the Management of Natural Resources, etc., shall be drafted if the detailed development plan permits the use of land, buildings or other installations which have a considerable impact on the environment, public health or the management of natural resources. *Act (1995:1197)*

Section 19: When the first draft of a detailed development plan has been produced, it shall, unless this is completely unnecessary, be accompanied by one or more maps (base maps) and a list of properties. In so far as the plan affects them, the real property list shall contain details about:

1. properties, land which is owned jointly by several proprietors and other areas as well as the owners of other rights, apart from ownership through a co-operative housing association and rental tenure, in the aforementioned properties, and
2. joint facilities in accordance with the Act (1973:1149) on Joint Facilities and the owners of the properties which utilise these facilities.

If a joint ownership association, in accordance with the Act (1973:1150) on the Management of Joint Ownership, is responsible for joint ownership, special rights or the joint facility, the association shall be noted as the owner or occupier instead.

Section 20: When the first draft of a detailed development plan has been produced, the municipality shall consult the County Administrative Board, the property registration authority and the municipalities affected by the proposals. The parties concerned and the members of co-operative housing associations, tenants and residents affected by the proposals as well as those public bodies, associations and other private individuals who have more than a passing interest in the proposals, shall be provided with an opportunity to be consulted. *Act (1995:1197, 1995:1415)*

Section 21: The purpose of consultation is the exchange of information and views. During consultations, the municipality should present relevant planning data of importance as well as explain the proposals' most important consequences. If there is a programme or an environmental impact analysis for the plan, these shall also be presented. Consultations concerning the detailed development plan shall also include the presentation of the reasons for the plan.

The views which have been put forward in consultation as well as the comments and proposals made as result of these views shall be assembled and presented in a joint consultation document. *Act (1995:1197)*

Section 22: During consultations the County Administrative Board shall give particular attention to:

1. giving advice on the application of Parts 2 and 3 and ensuring that national interests in accordance with the Act (1987:12) on the Management of Natural Resources, etc. are taken into consideration,
2. ensuring that matters concerning the use of land and water areas which affect two or more municipalities are co-ordinated in an appropriate manner and
3. ensuring that national interests are safeguarded.

Section 23: Before a detailed development plan is adopted, the municipality shall publicly exhibit the planning proposals for a period of at least three weeks. Anyone wishing to make representations about the proposals shall do this in writing during the exhibition period.

Section 24: A notice about the exhibition of the planning proposals shall, at least one week before the commencement of the exhibition period, be displayed on the municipality's notice-board as well as be published in the local newspaper. However, notice may be given, at the latest, on the day when the exhibition begins if it has been decided that the exhibition will last at least four weeks.

The notice shall indicate:

1. where the planning area is located,



2. whether the proposal deviates from the municipal comprehensive plan,
3. what land or special rights to land as specified in Part 6, Sections 17 - 19, could be affected as a result of the adoption of the plan,
4. where the exhibition is to take place
5. when, how and to whom, representations regarding the proposals may be made and
6. failure to make representations, in accordance with Part 13, Section 5 during the exhibition period, can result in forfeiting the right to appeal against the decision to adopt the plan.

With regard to public notices, the regulations in the Act (1977:654) on Public Notices about Cases and Matters before Public Bodies, etc. shall be followed.

One copy of the planning proposals together with the report of plan in accordance with section 26, the implementation report prepared in accordance with Part 6, Section 1 and the consultation document shall, prior to the exhibition of the proposals, be sent to the County Administrative Board and to other municipalities affected by the proposals. *Act (1989:1049)*

**Section 25:** Information about the contents of the public notice shall, prior to the day of notification, be sent by letter to:

1. the known parties involved,
2. the tenant organisations known to have an agreement about negotiations concerning a property which is affected by a planning proposal or, if a negotiation agreement does not exist, a tenant organisation known to be associated with a national organisation and whose property is located within the area concerned and
3. others having a considerable interest in the proposals.

If the proposals concern a joint property, for which there is a board or other organisation appointed for its management, information shall be sent to a member of the board or to the manager of that organisation. If there is no board or manager, notice shall be sent to one of the co-owners so that the information is available to the others.

Notice in accordance with the first paragraph need not be given if a large number of persons has to be informed and this would involve greater cost and inconvenience than is warranted by sending out individual information. However, the owners of land and the holders of special rights to land referred to in Section 24, first paragraph, item 3, shall always be informed in accordance with the first paragraph above. The same applies to those who have received notification according to Section 28 a. *Act (1991:604)*

**Section 26:** During the exhibition period the planning proposals shall be accompanied by:

1. a report of plan and an implementation report,
2. a consultation report,
3. the programme for the plan, an environmental impact assessment, the base map and the list of properties, if these documents have been drafted, and
4. other planning data which the municipality regards of importance for an assessment of the plan.

The report of plan shall describe the planning conditions, the purpose of the plan and the reasons for it, as well as the considerations which formed the basis for the extent of the demand for building permits within the planning area. The report shall include illustrative material unless that is obviously unnecessary. If the planning proposals depart from the municipal comprehensive plan, then these departures, and the reasons for them, shall be specified in the report.

Other available material illustrating the intentions of the planning proposals should also be exhibited. *Act (1994:852)*

**Section 27:** Following the exhibition period, the municipality shall compile all the written comments received during the period of publicity and present its reactions to them in a statement which is added to the assembled documents.

This statement, or a notice about where it is available for inspection, shall be sent by post as soon as possible to all those whose comments on the exhibited planning proposals have not been taken into consideration. If a large number of such persons is to be informed, a notice may instead be given in the manner indicated in Section 24, or by a notice displayed on the municipality's notice-board, or in news-sheets which are distributed to residents affected by the proposals of this detailed development plan and by letters to the parties concerned and the organisations or associations specified in Section 25, item 2, and whose comments have not been taken into consideration.

If the planning proposals, as a result of the exhibition, are considerably amended, then a new exhibition should be held. *Act (1989:1049)*

**Section 28:** Instead of what is prescribed in Sections 18, 20, 21, second paragraph, and Sections 22 to 27, the regulations in the second paragraph (simplified plan approval) may be applied if the proposals contained in the detailed development plan are of limited significance, lack public interest and are in accord with the municipal comprehensive plan and the County Administrative Board's scrutiny document as specified in Part 4, Section 9.

When simplified plan approval procedures are applied, the County Administrative Board and those indicated in Section 25, first paragraph, shall be consulted. When the first draft of the detailed development plan has been produced, they shall be notified and, if they disapprove of the proposals, shall be given a period of at least two weeks in which to make written objections to the proposals. This period can be shortened if all those concerned agree to this. A compilation of the comments received and the proposals resulting from them are to be presented in a separate document which shall be added to the assembled planning documents.

**Section 28 a:** Before a detailed development plan can be adopted, the municipality must notify those who, as a result of the plan being adopted, are likely to be affected in the way noted in Part 14, Section 8, first paragraph, item 2 or 3, and that they, within an prescribed period of time of at least two months, must notify their demands for compensation or land acquisition to the municipality. Such a notification shall be accompanied by details about the regulations to be drafted, amended or annulled. Those who do not notify their demands within the prescribed period of time forfeit their right to compensation or acquisition.

The regulations in the first paragraph do not prevent demands for compensation or acquisition being put forward as a result of damage which could not reasonably have been foreseen within the prescribed period of time. *Act (1991:604)*

**Section 29:** When a detailed development plan is adopted by the municipal council, the council may delegate to its Executive Committee or the Building Committee the approval of plans which are neither of significance in principle nor of major importance.

**Section 30:** At the latest, the day after displaying on the municipality's notice-board, the confirmed minutes recording the council's decision to adopt the detailed development plan, information about this notice plus an extract from the minutes about the decision, as well as details about what shall be observed by those wishing to appeal against this decision, shall be sent by post to:

1. the County Administrative Board as well as any regional planning body and other municipalities affected by the plan and

2. the parties concerned, members of co-operative housing associations, tenants and residents as well as those organisations or associations specified in Section 25, first paragraph, item 2, if they have, at the latest during the exhibition period or during the period indicated in Section 28, second paragraph, submitted written representations stating that comments concerning the proposals have not been taken into consideration, or if they are eligible to appeal as a result of the regulations in Part 13, Section 5, second paragraph.

If a large number of persons is to be informed in accordance with the first paragraph, item 2 above, and if this should involve greater cost and inconvenience than is warranted for the purpose of notifying each of them, notification may be given instead by publishing a public notice in the local newspaper in the manner indicated in Section 24, or by a public notice displayed on the municipality's notice-board, by news-sheets which are distributed to the residents affected and by letters to the parties concerned and the organisations and associations specified in the first paragraph, item 2. The owners of land and those persons holding special rights to land which the plan may specify for acquisition, in accordance with Part 6, Sections 17 - 19, shall always be informed in the manner prescribed in the first paragraph. The same applies to those who have been notified in accordance with Section 28 a.

Notification in accordance with the second paragraph shall include a summary of the decision, the time when the decision was displayed on the municipality's notice-board as well as what is to be observed by those who wish to appeal against the decision. If a notice is inserted in the local newspaper, this must be done on the same day as the decision to adopt the plan has been displayed on the municipality's notice-board. *Act (1991:604)*

**Section 31:** When the decision to adopt the detailed development plan has become legally effective, notification shall be given to those who, as a result of this decision, are entitled to compensation in accordance with Part 14, Sections 5 or 8. This notification shall also contain information about the contents of Part 15, Section 4. The municipality shall decide whether this information shall be sent by letter or in the manner prescribed in Section 24.

The municipality shall note on the planning documents the date when they became legally effective. If an ordinance in accordance with Part 13, Section 8, has been made, then the date of the ordinance shall be noted. As soon as possible after the decision has become legally effective, one copy of the plan, the report of plan, the implementation report and the real property list shall be sent to the County Administrative Board and the land register and the property registration authority unless this is obviously unnecessary.

If these documents are not sent to the above authorities within two weeks of the plan becoming legally effective, the authorities shall immediately be informed of the content of the documents. *Act (1995:1415)*

**Section 32:** The regulations under Sections 18 to 31 shall also apply when a detailed development plan is amended or annulled.

**Section 33:** The regulations under Section 19 concerning the real-property list and the regulations included under Sections 20 to 31 shall apply when area regulations are adopted, amended or annulled.

**Section 34:** The decision to adopt, amend or annul a detailed development plan or area regulations is not valid until the decision has become legally effective or is implemented in accordance with Part 13, Section 8, second paragraph.

**Section 35:** Area regulations cease to be valid if the planning area to which they refer is covered by an adopted detailed development plan which has become legally effective or a determination has been made in accordance with Part 13, Section 8, second paragraph.

**Section 36:** From Part 8, Sections 11, 12, 16 and 18, it follows that a building permit, a demolition permit or a site improvement permit can not be issued if it would be contrary to the stated intentions of the detailed development plan or area regulations.

Proposals which do not require permission and which concern buildings, other installations, sites and public spaces, shall be carried out in a way that is not contrary to the intentions of the detailed development plan or area regulations. This does not concern those proposals listed in Part 8, Section 4, first paragraph, which do not require permission.

In accordance with other special directives, decisions in accordance with certain other Acts shall not contravene the regulations of a detailed development plan or area regulations.  
*Act (1994:852)*

## Part 6. Plan implementation

### Implementation report

**Section 1:** In the drafting of a detailed development plan, a special document (the implementation report) shall describe the organisational, technical, financial and the real estate actions required for the co-ordinated and otherwise essential implementation of the plan.

### Joint development

**Section 2:** The municipality may decide that development, in accordance with the Act (1987:11) on Joint Land Development, may be permitted if it is important that sites be assembled for the utilities required for such joint development. Notification of this decision shall be given in the detailed development plan or the area regulations.

The decision shall indicate the main boundaries within which joint development shall take place as well as within what period a development decision according to the Joint Land Development Act shall be notified. This period should be limited to a maximum of five years from the day on which the detailed development plan or the area regulations have been adopted and become legally effective or from an earlier date when part of the detailed development plan or the area regulations is to be implemented in accordance with a determination under Part 13, Section 8, second paragraph. If no development decision has been taken within the stipulated period, the detailed development plan or the area regulations will become invalid as far as the municipality's decision on joint development is concerned.

### Property regulation plan

**Section 3:** The property regulation plan shall note, for areas covered by a detailed development plan, the regulations on the subdivision of land into real property units as well as easements, including those for public utilities, and similar special rights as well as communal facilities.

The property regulation plan shall be adopted if:

1. it is necessary for the implementation of appropriate real property unit subdivision,
2. it otherwise facilitates the implementation of the detailed development plan and

3. if demanded by a property owner and the plan is not obviously unnecessary.

**Section 4:** The property regulation plan shall cover a suitably delineated area. Reasonable consideration shall be given to existing development, ownership and property rights which can affect the implementation of the plan.

If the plan is to regulate the subdivision of land into properties, or if it includes regulations about easements and similar rights, then Part 3, Section 1, of the Property Formation Act (1970:988) shall apply.

If the plan is to regulate the establishment of joint ownership, then Sections 5 and 6 of the Act (1973:1149) on Jointly Owned Property shall apply. If it is to include regulations about public utility rights then Section 6 of the Public Utility Rights Act (1973:1144) shall apply.

**Section 5:** The property regulation plan shall not conflict with the detailed development plan. However, minor deviations may be allowed if these do not conflict with the purpose of the detailed development plan. In such cases it will therefore be assumed that the detailed development plan's design follows that of the property regulation plan.

**Section 6:** Where necessary, and considering the purpose of the property regulation plan, the detailed development plan shall indicate:

1. the area's subdivision into properties,
2. what easements, public utility rights and similar special rights are to be created, amended or annulled,
3. the installations, etc., which are to be jointly owned and
4. the properties which will participate in the joint ownership as well as the areas for such installations.

**Section 7:** In the property regulation plan, it may be noted that the plan is only valid when a decision to adopt a detailed development plan has become legally effective or is to be implemented in accordance with a determination under Part 13, Section 8, second paragraph.

**Section 8:** A property regulation plan consists of a basic map and a special document containing regulations. The plan may contain either of these documents or a single document which is a combined basic map and regulations if the contents of the plan are completely clear. *Act (1989:1049)*

**Section 9:** The property regulation plan shall be accompanied by a report of plan in accordance with Section 12. If the property regulation plan consists of only one document, the report of plan may be included in that document. *Act (1989:1049)*

**Section 10:** Before the expiry of the detailed development plan's implementation period, the property regulation plan may, against the wishes of the property owners concerned, be amended or annulled but only where this is necessary with regard to new conditions of great public importance which could not be foreseen during the drafting of the plan.

After the expiry of the detailed development plan's implementation period, the property regulation plan may be amended or annulled without consideration of the rights which may have arisen as a result of the property regulation plan.

Section 11: If a detailed development plan is amended and this results in it conflicting with the property regulation plan, then the property regulation plan will cease to be valid for those areas where it conflicts with the detailed development plan. If a detailed development plan is wholly or partially annulled, the property regulation plan will cease to be valid for the same areas.

Section 12: The regulations in Part 5, Sections 18 - 28 and 30 shall be applied when the property regulation plan is drafted. If the property regulation plan is not drafted simultaneously with the detailed development plan, consultations are not required with the County Administrative Board or the municipality concerned. Nor is it necessary to send them copies of the plan.

The report of plan shall indicate which detailed development plan the property regulation plan refers to and the reasons for the design of the property. If the proposals deviate from the detailed development plan, these deviations and the reasons for them shall be described in the report. *Act (1989:1049)*

Section 13: The property regulation plan is adopted by the Building Committee or, if the plan is drafted simultaneously with the detailed development plan which is not to be adopted by the Committee, by that body which adopts the detailed development plan.

The municipality shall note on the plan documents the date when the decision becomes legally effective. If a determination has been made under Part 13, Section 8, second paragraph, the date of this determination shall be noted. As soon as possible after the property regulation plan has become legally effective, one copy of the plan, the report of plan and the real property list shall be sent to the land registration authority unless this is obviously unnecessary.

If the documents are not sent to the above authority within two weeks of the plan becoming legally effective, the authority shall immediately be informed about the content of the documents.

Where the detailed development plan, in accordance with Section 5, is assumed to have the same design as the property regulation plan then the municipality shall indicate deviations on the detailed development plan and send a copy of the detailed development plan and the documents indicated in the second paragraph to the County Administrative Board, or inform the board of the content of these documents in accordance with paragraph three. *Act (1996:1315)*

Section 14: The regulations in Sections 3 - 9, 12 and 13 shall also apply to the amendment or annulment of a property regulation plan.

Section 15: The decision to adopt, amend or annul a property regulation plan is valid when the decision has become legally effective or may be implemented following a determination made under Part 13, Section 8, second paragraph. However, the Building Committee may decide that a decision reached by using simplified planning procedures may be implemented in spite of the decision still not having become legally effective, and if an owner of a property covered by the plan demands it and all those affected by the decision have given their written approval to the proposal which is the basis of the decision. *Act (1991:604)*

Section 16: From Part 8, Section 11, it follows that a building permit can not be issued in contravention of the property regulation plan or to a greater extent than is indicated therein.

Proposals which do not require a building permit and which concern buildings, other installations, sites and public spaces shall be carried out so that they do not contravene the

property regulation plan. However this does not refer to the measures specified in Part 8, Section 4, first paragraph, items 3 - 6.

Unless especially specified, decisions in accordance with other Acts shall not contravene the regulations contained in the property regulation plan. *Act (1987:246)*.

#### The relinquishment of land etc.

**Section 17:** The municipality may acquire land which, in accordance with the detailed development plan, is to be used for public space for which the municipality is responsible.

Other land, which according to the plan is to be used for other than private development, shall be acquired by the municipality unless its future use is not already safeguarded.

If land which the municipality is required to acquire, in accordance with the first and second paragraphs, is covered by special rights, then these must also be acquired by the municipality.

Regulations concerning municipal responsibility to acquire land under special circumstances, can be found in Part 14.

**Section 18:** If the municipality is not responsible for public space then the owner of undeveloped land, which according to the detailed development plan is intended for use as public space, shall make this land available without compensation, if the sites in his/her ownership at the time of the plan's adoption, are to be used as intended.

**Section 19:** At the request of the municipality, the County Administrative Board can direct that land, for which the proper use in accordance with the proposals in the detailed development plan, is public space for which the municipality is responsible or for public buildings, shall be made available to the municipality without compensation. At the request of the municipality, the County Administrative Board may also direct that land to be used for public space for which the municipality is not responsible, shall be given to the body, etc. responsible for it and without compensation. Adoption of the plan shall be delayed until these matters have been determined and the decisions have become legally effective.

This directive shall only be utilised when it can be regarded as reasonable with regard to the benefit the landowner can expect from the plan and to other circumstances.

The land covered by the directive shall be described in terms of location and boundaries. The land shall be relinquished or surrendered when required for the intended purpose.

If the detailed development plan is amended, the County Administrative Board shall, at the request of the municipality, direct that land which has been transferred, or shall be surrendered, can be exchanged for other land if this is suitable and can take place without inconvenience to the owner.

**Section 20:** If a question about the application of Section 19 arises, the municipality shall immediately notify the land registration authority so that this is noted in the land register. Land transfer which takes place after such notification, does not affect the assessment which shall be made according to Section 19, second paragraph.

**Section 21:** Anyone surrendering land in accordance with Section 19 shall ensure that the land is not mortgaged or covered by any special right. If this cannot be ensured, the landowner is responsible for compensating any damage which may arise to the person accepting the transfer.

**Section 22:** When a directive is made in accordance with Section 19, the County Administrative Board can be requested by the municipality to direct that the landowner is

responsible, to the extent determined by the County Administrative Board, for financing the construction of roads and streets as well as installations for water supply and sewerage.

**Section 23:** The regulations in Sections 19 - 22 concerning landowners also apply to jointly owned property according to the Act (1987:11) on Joint Land Development.

**Section 24:** If a municipality is responsible for public space the municipality shall, following the expiry of the implementation period, acquire land or those parts of land which are owned by different owners and which according to the property regulation plan shall form one real property unit.

A municipality which is responsible for public space may also, following the expiry of the implementation period, purchase land which has not been developed in accordance with the detailed development plan. The right to purchase does not exist if there is a building permit which can be utilised.

If the land referred to in the first and second paragraphs is covered by a special right, then these rights may be acquired. *Act (1989:1049)*

**Section 25:** The right to use land in accordance with Section 18 or 19 overrules other rights to land which have arisen as a result of the adoption of a detailed development plan.

#### **Surrender of certain public space, etc.**

**Section 26:** Within areas covered by a detailed development plan, the municipality shall be responsible for public space, unless there are special reasons against this. The detailed development plan shall also indicate if the municipality is not responsible for public space as specified in Part 5, Section 4.

The municipality shall, following the completion of building in accordance with the detailed development plan, construct the streets and other public spaces for which the municipality is responsible and in a way that such spaces can be utilised as intended. Before the expiry of the implementation period, these spaces shall be surrendered for public use in areas that have been constructed in accordance with the detailed development plan. In areas which, after the expiry of the implementation period, are developed in accordance with the detailed development plan, public spaces shall be surrendered for public use when the buildings are completed.

**Section 27:** When streets and other public spaces, for which the municipality is responsible, have been surrendered for public use, their breadth, height and general design shall agree with what is stipulated in the detailed development plan. They shall be designed in an appropriate manner and in accordance with local custom. Minor deviations from the plan can be tolerated if they are not contrary to the intentions of the plan.

**Section 28:** If someone wishes to erect a building before the street which serves that building has been constructed or before sewage pipes are laid, then the road access and sewage pipes must be constructed by the developer. The municipality shall permit the developer to use land, which the municipality owns, for its intended purposes and at no charge.

**Section 29:** If the state is responsible for roads within the area covered by a detailed development plan, then what was specified in Section 26, second paragraph, and Section 27, regarding the municipality's responsibilities for streets will also apply to the state.



Costs which have arisen as a result of a street included in the plan being built to a greater width or to a more expensive standard than what is required with regard to traffic, shall be borne by the municipality unless the Government has otherwise determined.

**Section 30:** The municipality shall maintain the streets and other public spaces for which it is responsible. The responsibility for maintenance remains even when the detailed development plan for the area has been annulled.

If the state is responsible for roads in the area covered by a detailed development plan then, within the constraints indicated in Section 29, second paragraph, the state shall be responsible for the maintenance of public roads in accordance with the regulations in the Road Act (1971:948).

With regard to the maintenance of roads and other public spaces in private ownership, regulations are given in the Act (1939:608) on Private Roads and the Act (1973:1149) on Communal Facilities.

#### Street costs, etc.

**Section 31:** If a municipality, on the basis of its responsibility, constructs or improves streets and other public spaces, the municipality may decide that the costs of such measures, which are intended to meet the demands for public spaces and for the installations linked to them, shall be borne by the owners of properties in the area.

The costs shall be apportioned between the properties in a reasonable and correct manner.

The municipality decides on the delineation of the area within which the apportionment shall take place, on the costs to be apportioned as well as on the principles by which this will be done.

**Section 32:** If a municipality, on the basis of its responsibility, constructs or improves a street, it may decide that the costs of this work shall be borne by the owners of the properties served. For each property, a fee may be charged which corresponds to half of the cost for the work carried out outside the property. The costs of other installations normally involved with street construction can also be charged to the property owners. The costs of providing cross-roads may be charged in equal amounts to the property owners at the cross-roads.

If the costs for the building or improvement of a road are not the same everywhere, the municipality may decide that the costs to be borne by property owners shall be apportioned in accordance with some reasonable and correct system other than that indicated in the first paragraph.

**Section 33:** The payment which according to Sections 31 and 32 shall be paid by each property can be reduced if the costs are unreasonably high or if the measures to which they relate exceed what is considered normal with regard to the permitted use of the property.

**Section 34:** The basis for the calculation of payments in accordance with Sections 31 and 32 is either the actual cost or that which, on the basis of previous experience, is calculated from the cost of building or improving similar streets and other public spaces.

**Section 35:** The property owner's responsibility to pay the municipality for the costs of streets and other public spaces arises when the development, for which payment is to be charged, is used for its intended purpose.

Payment shall be made on demand. Interest from the date on which the bill falls due shall be paid on bills which are unpaid, in accordance with Section 6 of the Interest Act (1975:635) and from the date on which payment falls due.

If payment charges are onerous with regard to the property's economic viability or other circumstances, the property owner may make payments in instalments if acceptable collateral can be provided. Payment by instalments shall be at least one-tenth per annum. Interest shall be paid according to Section 5, of the Interest Act, on the unpaid remainder, on each part of the payment which falls due in the future calculated from the day when the first instalment is payable until the remaining payment is paid, or interest shall be paid in accordance with the second paragraph. If these conditions of payment are still too onerous for the property owner, the conditions shall be readjusted.

With regard to responsibility for making payments, a new owner is bound to the same extent as the previous owner. However, the new owner is not responsible for payments to the municipality which have fallen due before the date of the new owner taking possession.

Section 36: Before the municipality decides that the cost of streets and other public spaces shall be paid by the property owner in accordance with Sections 31 and 32, the municipality shall study the issue and present proposals as a result of that study. The parties concerned and the members of co-operative housing associations, tenants and residents affected by the proposals as well as associations and other individuals having a serious interest in the proposals shall be consulted.

The purpose of the consultations is the exchange of information and points of view. During the consultations, the reasons for the proposals, important planning data and the more important consequences of the proposals shall be presented. The results of the consultations and the proposals which arise as a result of the points of view raised shall be presented in a consultation report.

Proposals concerning payments in accordance with Section 31 shall be exhibited for a period of at least three weeks after notice about this has been given in accordance with Part 5, Section 24. Notice about the exhibition of the proposals shall, in addition, be sent by post to all known property owners whose rights are affected by the proposals. Notice does not need to be sent to those who have given written approval of the proposals. During the exhibition period the proposals shall be accompanied by the consultation report. When the exhibition period expires, the municipality may make a decision on this matter.

If the proposals result in responsibility for payment in accordance with Section 32, the property owners whose rights are affected and who have not given their approval of the proposals, shall be given an opportunity to express their opinions before a decision is made. The proposals shall be accompanied by the consultation report. *Act (1989:1049)*

Section 37: Land in front of properties which are located on a square, park or other public space, shall be regarded as a street having a width corresponding to 1.25 times the highest permitted building height, in accordance with the detailed development plan and approved for the property when the street was made available for public use.

Section 38: What is specified in this Section with regard to properties shall also apply to land which forms a jointly owned property. By "property owner" is meant the owner of real property which is part of a jointly owned property. If the jointly owned property is not intended for buildings, it shall be regarded as built upon when it is substantially used for its intended purpose. The highest permitted height of building is assumed to be the median of the properties comprising the jointly owned property.

## The determination of compensation

Section 39: When determining the compensation to be paid in the cases specified in Sections 17 or 24, Part 4 of the Expropriation Act (1972:719) shall apply. What is stated in Part 4, Section 3 of that Act shall apply to increases in value during the period dating from the day ten years before the date when the issue of compulsory purchase was raised.

## Part 7. Regional planning

### Regional planning body

Section 1: If matters concerning the use of land and water areas in several municipalities require joint study or if the work on comprehensive plans needs co-ordination and if this study and co-ordination does not come about in any other manner, the Government may appoint a regional planning body which, for either a limited period or until further notice, will be responsible for regional planning. The appointment shall include the main tasks of the regional planning body.

The Government may also appoint an existing municipal federation as a regional planning body. The Government may also determine that the municipalities affected shall establish a special regional planning federation which shall be the regional planning body. For this type of regional planning federation, the Act (1985:894) on Municipal Federations shall apply unless contradictory regulations are given in this Section.

Special regulations cover the regional planning of municipalities in the County of Stockholm.

Section 2: A regional planning body shall not be established if the municipalities concerned are generally opposed to it.

Section 3: The regional planning body shall follow regional issues within its region and produce studies on a continuous basis for the planning of municipalities and state authorities.

The regional planning body can adopt a regional plan for the region or part of it. In this case Sections 4 - 7 shall apply.

The region comprises the municipalities which have appointed a regional planning body.

### Regional plan

Section 4: The regional plan shall serve as a basis for decisions concerning comprehensive plans, detailed development plans and area regulations. The plan can, where it is of importance to the region as a whole, suggest principles for the use of land and water areas as well as guidelines for the location of development and installations.

The regulations in Part 4, Section 1, first paragraph and Section 2, concerning planning documents and their contents as well as the report of plan, shall also apply to a regional plan. However, no description of plan implementation is required. *Act (1995:1197)*

Section 5: When the first draft of a regional plan is produced, or amendments to or annulment of a plan are proposed, the regulations in Part 4, Sections 3 - 10, on consultation, exhibition, notification, scrutiny documents and statements shall apply with the exception that the exhibition period shall be at least three months.

Section 6: The regional plan is adopted by the council of the municipal federation or the regional planning federation whichever is the regional planning body. Amendments to and annulment of the plan are also decided by that council.

Section 7: One day, at the latest, after the council's minutes concerning the decision to adopt, amend or annul the plan have been confirmed and displayed on the notice-board in accordance with Part 2, Section 13 of the Municipal Federation Act (1985:894), then information about this notice plus an extract from the council's minutes shall be sent to the municipalities and County Administrative Boards affected by the plan and to the Government.

When the decision has become legally effective the plan shall be sent to the County Administrative Boards within the region and to the National Board of Housing, Building and Planning. *Act (1990:1365)*

Section 8: The regional plan is valid for a maximum period of six years calculated from the expiry of the time specified in Part 12, Section 5, or, if the Government has scrutinised the plan's adoption, six years from the date of the Government's decision.

The decision to amend or annul the plan is valid from the date indicated in the first paragraph. The amended plan is valid only during the remaining period of the original plan's validity.

## Part 8. Building permits, demolition permits and site improvement permits

### Proposals requiring a building permit

#### *General regulations*

Section 1: A building permit is required in order to:

1. erect a building,
2. make extensions to a building,
3. use or equip a building either wholly or in part for a purpose which is considerably different from that for which the building has previously been used or for which a building permit has been granted or
4. make alterations to a building in such a way that it provides an additional residence or other premises for retailing, handicrafts or industry.

With regard to buildings for forestry, agricultural or similar occupations and in an area which is not covered by a detailed development plan, a building permit is only required for the proposals specified in the first paragraph, item 3.

Sections 4 and 10 contain the special regulations for one- and two-family dwellings and for certain buildings which are intended for total defence purposes.

In accordance with Sections 5 - 7, the municipality may either waive the demand for a building permit or decide on stricter conditions. *Act (1994:852)*

Section 2: With regard to developments other than buildings, a building permit is required in order to:

1. construct an entertainment park, a zoo, a sports ground, a ski slope with lifts, a firing-range, a harbour for leisure craft, an outdoor swimming pool, a car-racing track or a golf course,
2. provide a storage area or storehouse,

3. construct tunnels or rock caverns which are not intended for an underground railway or mine operations,
4. erect fixed cisterns or other installations for chemical products which are a danger to public health and the environment or for materials which may involve the risk of fire or other types of accident,
5. erect radio or television masts or towers,
6. erect a wind-power station if the turbine diameter is greater than two metres or if the wind-power station is sited in such a way that the distance to its boundary is less than the station's height above ground level or if the wind-power station is to be fixed to a building,
7. erect walls or fences,
8. provide parking spaces outdoors,
9. arrange burial grounds or to
10. make major alterations to the developments specified in items 1 - 9.

A building permit is not required to for erecting matters specified in this paragraph, items 4 and 5, or for the making of alterations, if they relate to a smaller matter only intended to meet the requirements of a particular property. A building permit for proposals in accordance with the first paragraph, item 8, is not required if the property concerned only contains one or two single-family dwellings or a two-family dwelling and the parking spaces are solely intended to meet the requirements of those properties or if the parking spaces are constructed in accordance with the Road Act (1971:948) or on land which, in a detailed development plan, has been set aside for a street or road.

In accordance with Sections 5 and 6, third paragraph, item 2, a municipality may waive the requirement for a building permit or make less stringent demands. Section 10 contains the special regulations relating to particular installations intended for total defence.  
*Act (1992:1769)*

#### *Special regulations for areas covered by a detailed development plan*

Section 3: In areas covered by detailed development plans, and in addition to the regulations in Sections 1 and 2, a building permit is required in order to:

1. repaint a building or replace the external materials covering either its walls or roof as well as other alterations which involve major changes to the external appearance of the building,
2. erect or make major alterations to a sign or illuminated installation or to
3. erect, make extensions to or in other ways make alterations to buildings required for agricultural, forestry or similar purposes.

Sections 4 - 10 contain the special regulations for one- and two-family dwellings as well as for certain buildings intended for total defence purposes. In accordance with Section 5, a municipality may waive the requirement for a building permit for any proposals specified in the first paragraph.

#### *Special regulations for one- or two-family dwellings*

Section 4: The regulations in Sections 1 - 3 do not apply to the proposals listed below with regard to one- or two-family dwellings and their free-standing outhouses, garages and other small ancillary buildings:

1. the repainting of buildings in an area covered by a detailed development plan unless this involves a major change in the building's character,
2. the provision of a sheltered outdoor area next to a dwelling as long as the wall or fence is not higher than 1.8 metres, does not extend more than 3.0 metres from the dwelling and is not placed closer to the plot boundary than 4.5 metres,

3. the provision of a protecting roof over the type of outdoor area described in item 2, or over a terrace, balcony or entrance if the protecting roof is not greater than 12 square metres and does not come closer than 4.5 metres to the neighbouring plot,

4. the erection of two ancillary buildings adjacent to the dwelling, if their total building area does not exceed 10 square metres, the height to the roof ridge does not exceed 3 metres and the buildings are not placed closer to the plot boundary than 4.5 metres.

In areas not covered by detailed development plans, a one- or two-family dwelling and its ancillary buildings, walls and fences, not included in an area defined as a cluster of dwellings, are excluded from the regulations in Sections 1 and 2 with regard to the following proposals:

1. the erection of smaller extensions if these do not come closer to the plot boundary than 4.5 metres,

2. the erection of ancillary buildings, walls or fences in the immediate vicinity of the dwelling if these do not come closer to the plot boundary than 4.5 metres.

If the neighbours affected permit the proposals listed in the first paragraph, items 2-4 above and in the second paragraph, to be carried out closer than 4.5 metres to the plot boundary, then no building permit is required.

In accordance with Section 6, the municipality may decide whether the proposals specified in paragraph, item 1 and the second paragraph will require a building permit.  
*Act (1995:1197)*

### Municipal decisions on the extent of a building permit

Section 5: In a detailed development plan or area regulations, the municipality may decide that a building permit is not required as stated in the plan or decide on the time limits in order to carry out the proposals specified in Sections 1-3.

The municipality may, in the area regulations, decide that a building permit is not required in the manner described in the regulations to:

1. erect, extend or in other way alter ancillary buildings,
2. erect small extensions,
3. *Repealed by Act (1994:852)*
4. install or alter developments specified in Section 2,
5. extend or otherwise alter industrial buildings or
6. erect, extend or otherwise alter simple holiday cottages, allotment cottages and similar buildings.

Regulations in accordance with the first or second paragraph need not be issued if a building permit is required to safeguard the interests of neighbours or the general public.

Within a cluster of dwellings, permission is required from the neighbours affected if measures, of the type referred to in the first paragraph, items 1 and 2, are to be carried out without a building permit. *Act (1995:1197)*

Section 6: A municipality may, in an area of environmental value, decide that a building permit is required for:

1. the carrying out of proposals specified in Section 3, first paragraph, item 1, in an area not covered by a detailed development plan.
2. the repainting of a one- or two-family dwelling and its ancillary buildings, in an area covered by a detailed development plan or
3. the repair of buildings which are of special conservation value according to Part 3, Section 12.

The municipality may, in areas which are of environmental value, or where area regulations have been issued, determine that a building permit is required for the proposals specified in Section 4, second paragraph, items 1 and 2.

The municipality may additionally, and if there are special reasons, determine that a building permit is required:

1. within areas not covered by a detailed development plan for the erection of, extension and otherwise alteration to buildings for agricultural, forestry and similar activities or
2. for the erection or considerable alteration of installations for ground water sources referred to in Part 4, Section 1, paragraph 1a of the Water Act (1983:291).

Regulations in accordance with the first to third paragraphs shall be issued as part of a detailed development plan or area regulations.

With regard to buildings referred to in Section 10, regulations in accordance with the first and second paragraphs as well as the third paragraph, item 2, need not be issued.  
*Act (1991:604)*

**Section 7:** A municipality may determine, in its area regulations, that a building permit is required for:

1. the erection of or for making major alterations to an illuminated sign which is located close to existing or proposed installations for Total Defence, state airports, other public airports, nuclear reactors, other nuclear energy installations or other installations requiring a protective or safeguarding zone, or
2. the erection of or for making major alterations to signs or illuminated installations within areas of buildings of environmental value. *Act (1991:604)*

**Proposals which require a demolition permit or a site improvement permit**

**Section 8:** In areas covered by a detailed development plan, a demolition permit is required for the demolition of a building or parts of it, unless otherwise specified in the plan.

In its area regulations, a municipality may determine that a demolition permit is required for the demolition of buildings or parts of it.

A demolition permit is not required for the demolition of a building, or a parts of it, which may be erected without a building permit. However, a municipality may decide that a demolition permit is still required for such measures.

**Section 9:** In an area covered by a detailed development plan, and unless otherwise specified in the plan, a site improvement permit is required for excavation or infilling which involves major changes in the height of sites or land for public space. However, if a particular height for an area of land is stated in the plan, a site improvement permit is not required for the raising or lowering of the ground level to that height.

A municipality may determine in a detailed development plan that a site improvement permit is required for the felling of trees or for forest-planting.

In its area regulations a municipality may decide that a site improvement permit is required for excavation, infilling, tree-felling or forest-planting within areas which are intended for development or within areas which are close to existing or proposed installations for Total Defence, state airports, other public airports, nuclear reactors, other nuclear energy installations or other installations which require a protective or safeguarding zone.

**Certain buildings, etc. required for Total Defence purposes**

**Section 10:** Regulations concerning building, demolition and site improvement permits are not valid for buildings or other installations which are intended for Total Defence purposes and are secret. Consultations about such proposals shall be held with the County

Administrative Board who will suitably inform the municipality about the proposals and where they will be carried out.

## Requirements for the issuing of permits

### *Building permits*

Section 11: Applications for a building permit in an area covered by a detailed development plan shall be approved if:

1. the proposal does not conflict with the detailed development plan or the property regulation plan which is valid for the area with the proviso that the non-commencement of the implementation period should not prevent the issuing of a permit,
2. the property, the building or other installation on which the proposals are to be carried out:
  - a) are in accordance with the detailed development plan and with the property regulation plan for that area or
  - b) deviate from these plans but these deviations have been accepted in the issuing of a building permit in accordance with this Act or in property formation in accordance with Part 3, Section 2, first paragraph, second sentence in the Property Formation Act (1970:988) and
3. the proposals meet the requirements of Part 3, Sections 1, 2 and 10 - 18.

If the property, in any way other than is referred to under the first paragraph, item 2 b above, does not fit with the property regulation plan and if the application is received before the expiry of the implementation period of the detailed development plan, then the applicant shall be instructed, within a specified period, to apply for a property subdivision in accordance with the property regulation plan.

With regard to internal alterations to buildings in accordance with section 1, first paragraph, items 3 - 4, and external alterations to buildings in accordance with Section 3, first paragraph, item 1, a building permit shall be approved even though the requirements in the first paragraph, item 2 are not met.

Even if the requirements in the first paragraph are met, a building permit need not be issued for a proposal to be carried out on land which, according to the detailed development plan, is required for public purposes, unless the purpose is specified in greater detail in the detailed development plan.

If the detailed development plan does not include regulations about the building's use and the application refers to flats which are required to meet housing provision demands, a building permit need not be issued for measures in accordance with Section 1, first paragraph, item 3.

A building permit may be issued for measures which involve only a minor deviation from the detailed development plan or the property regulation plan and if the deviation is compatible with the purpose of the plan. In cases where the first paragraph 2 b and Part 17, Section 18 apply, a joint assessment shall be made of the deviating proposals which have been applied for as well as those previously approved. *Act (1994:852)*

Section 12: Applications for a building permit for proposals within an area not covered by a detailed development plan shall be approved if the proposal:

1. meets the requirements of Part 2,
2. is not to be preceded by the drafting of a detailed development plan as a result of the regulations in Part 5, Section 1,
3. does not conflict with the area regulations and
4. meets the requirements in Part 3, Sections 1, 2 and 10 - 18.



With regard to one- or two-family dwellings, applications for a building permit for additions in accordance with Section 13 shall be approved if the proposals meet the requirements in the first paragraph, item 4 and do not conflict with area regulations issued in accordance with Part 5, Section 16, items 3 or 4.

Regulations in the second paragraph also refer to buildings other than one- and two-family dwellings if the application relates to internal alterations in accordance with Section 3, first paragraph, item 1 or maintenance measures in accordance with Part 3, Section 12.

A building permit may be issued for measures which involve a minor deviation from the area regulations, if the deviation is compatible with the purpose of the area regulations.  
*Act (1994:852)*

**Section 12 a:** An application for measures referred to in Section 6, third paragraph, item 2 shall be approved unless the proposals involve the risk of damage to existing ground water sources or those referred to in the municipality's plans. *Act (1991:604)*

**Section 13:** Additions are defined as:

1. the erection of ancillary buildings,
2. the erection of minor extensions,
3. the carrying out of internal alterations in accordance with Section 3, first paragraph, item 1 or
4. the carrying out of maintenance work on such buildings in accordance with Part 3, Section 12. *Act (1994:852)*

**Section 14:** If a building permit cannot be issued as a result of regulations in Section 11 or 12, a building permit may be issued for temporary measures if this is requested by the applicant. Such a permit shall be issued if the application concerns a proposal which is supported in a detailed development plan regulation concerning the temporary use of a building or land.

In a permit issued with respect to the conditions in the first paragraph, permission may be given for the erection, extension or alteration of a building or other installation or the change of use of a building or part of it. The permit shall be valid for a maximum period of ten years. At the applicants request, the period of validity can be extended by a maximum of five years at a time. However, the total period shall not exceed twenty years.

**Section 15:** If a building permit has been refused because an application for expropriation has expired, a new application for a building permit need not be refused for the same reason until ten years have elapsed from the date on which the first application for expropriation was issued.

### **Demolition permits and site improvement permits**

**Section 16:** Applications for a demolition permit shall be approved unless the building or part of it:

1. is covered by a demolition prohibition in the detailed development plan or the area regulations,
2. is required for housing provision purposes or
3. should be preserved because of its historical, cultural, environmental or architectural value.

**Section 17:** *Repealed by Act (1994:819)*

Section 18: Applications for a site improvement permit shall be approved if the application does not:

1. conflict with the detailed development plan or area regulations,
2. prevent or make more difficult the use of the area for development purposes,
3. involve inconvenience in the use of defence installations or other installation specified in Section 9, third paragraph or
4. involve disturbance to surroundings.

A site improvement permit may be issued for proposals which involve minor deviations from a detailed development plan or area regulations if these deviations are compatible with the purpose of the plan or the area regulations.

### General regulations

Section 18 a: If a decision has been taken about the adoption, amendment or annulment of a detailed development plan, area regulations or a property plan, then a building, demolition or site improvement permit must be issued with the condition that the decision about the plan will become legally effective. The decision about a permit shall therefore inform the applicant that no rights concerning the commencement of operations are granted until the decision about the plan has become legally effective. *Act (1991:604)*

### The processing of permit applications

#### General regulations

Section 19: The Building Committee scrutinises applications for a building, demolition or site improvement permit.

Application for a permit shall be made to the Committee. Applications shall be made in writing. However, in the case of simple proposals, the application may be verbal.

Regulations concerning the scrutiny of building, demolition and site improvement issues, without a permit application having been made, can be found in Part 10, Section 19, second paragraph.

Section 20: When an application is made, it must be accompanied by the drawings, specifications and other information required for the scrutiny of the application.

If the application is incomplete, the Building Committee may instruct that the applicant provides further information within a specified period. If this instruction is not complied with, the application will be scrutinised as it is or rejected.

If an instruction in accordance with Section 11, second paragraph is not followed, the application will be dealt with as it is.

Instructions in accordance with the second or third paragraph shall be accompanied by a notification of the consequences of not following them.

Section 21: Even if a proposal regarding buildings, other installations or land does not require a permit in accordance with Sections 1 - 9, the Building Committee shall, if requested, examine the proposal as if permission were required.

Regulations in this Act concerning permits shall apply to matters specified in the first paragraph.

**Section 22:** Before an application is approved, the Building Committee shall inform the known parties, co-operative housing association members, tenants and residents who are affected as well as any known organisation or association specified in Part 5, Section 25, first paragraph, item 2 of their right to comment on the application, if the proposal:

1. involves a deviation from the detailed development plan or area regulations or
2. is to be carried out in an area which is not covered by a detailed development plan and the proposal is not a minor building operation which is covered by the area regulations.

In a situation covered by Part 5, Section 25, third paragraph, first sentence, notification can be prescribed in accordance with the methods prescribed in Part 5, Section 24, or by a notice displayed on the municipality's notice-board, or by information about this official notice being given in news-sheets which are sent out to the residents concerned and in letters which are sent to the parties concerned and the organisations and associations specified in Part 5, Section 25, first paragraph, item 2.

An application for a permit cannot be approved until the applicant has been informed of other persons' points of view and the applicant has been given an opportunity to comment on these. However, the Building Committee may determine an application without this taking place if it is obviously unnecessary for the applicant to make comments.

*Act (1989:1049)*

**Section 23:** If permission has been requested for the expropriation of the building or land for which a permit has been sought, or if work has commenced on the adoption, amendment or annulment of a detailed development plan, area regulations or property regulation plan covering the building or land, the Building Committee may determine that a decision regarding the permit be postponed until the expropriation issue has been settled or the work on the plan has been completed. If the municipality has not completed the work on the plan within two years of the Building Committee's receipt of the application for a permit, the application shall be dealt with without further delay.

**Section 24:** *Repealed by Act (1994:819).*

**Section 25:** If the Building Committee has reason to assume that a permit application also requires the permission of another authority, the committee shall inform the applicant of this.

**Section 26:** A decision giving permission shall indicate the period of the permission's validity as well as the conditions and other requisite information. *Act (1994:852)*

**Section 27:** The applicant shall immediately be informed by the Building Committee of the contents of its decision concerning the application. Information shall also be given to those individuals, organisations or associations who, in accordance with Section 22, first paragraph, have expressed their opinions, unless this is patently unnecessary. If the application has been rejected, then the applicant shall be informed about what must be observed when appealing against the decision and about any differences of opinion which are noted in the minutes or other records.

Notification shall be by service. Service on an applicant shall not involve application of Sections 12 or 15 of the Service Act (1970:428). *Act (1989:1049)*

and part 9  
Section 28: If a decision to scrutinise in accordance with Part 12, Section 4, has been issued, the Building Committee shall promptly submit the decision concerning the permit or the tentative approval which the instruction to scrutinise relates to, to the County Administrative Board.

Section 29: *Repealed by Act (1994:852)*

Section 29a: *Repealed by Act (1995:1197)*

Section 30: *Repealed by Act (1994:852)*

Section 31: *Repealed by Act (1994:819)*

Section 32: A building permit may specify that construction work must not commence before the property owner has paid for the costs of streets or other public spaces or arranged collateral for this payment.

If a building permit or a site improvement permit is granted for a proposal which has already been carried out, the permit shall state who is responsible for carrying out the alterations that may be required. The decision shall also state within what period the alterations shall be carried out.

#### Validity of a permit

Section 33: A building permit, a demolition permit or a site improvement permit will cease to be valid if the intended proposals have not been commenced within two years and completed within five years from the date when the permit was issued.

Regulations about building permits for temporary measures are contained in Section 14.

#### Tentative approval

Section 34: If required, the Building Committee can give tentative approval for a particular measure, requiring a building permit, to be permitted on the intended site.

When a tentative approval is granted, it shall contain the necessary conditions. The approval is binding if an application for a building permit is made within two years from the date when the tentative approval was issued.

If an application for a building permit is not made within the period specified in the second paragraph, the tentative approval will cease to be valid. Information about this must be contained in the tentative approval. The applicant shall also be informed that the tentative approval does not grant the right to commence the proposed works.

The regulations in Sections 19 - 23 and 25 - 28 also apply to tentative approvals.

### Part 9. Construction work, inspection and control

Section 1: Anyone carrying out, or retaining someone to carry out construction, demolition or site improvement works (the builder) shall ensure that the work is carried out in accordance with the regulations in this Act and in accordance with the directions or decisions which have been issued on the basis of these regulations. The builder shall also ensure that the required number of inspections and controls are carried out.

Work shall be planned and executed so that the least possible inconvenience or harm shall occur to people or property.

In the case of a demolition plan existing in accordance with Section 4, demolition shall be carried out so that the various demolition materials can be individually dealt with in accordance with the plan. *Act (1995:1197)*

**Section 2:** At least three weeks before work commences, the builder shall notify the Building Committee (building notification) about work concerning:

1. the construction of or extensions to a building,
2. measures as noted in Part 8, Section 2, first paragraph,
3. alterations to a building that affect the construction of load-bearing items or which considerably affect its layout plan,
4. the installation of or major alteration to lifts, fireplaces, flues or ventilation installations in buildings,
5. the installation of or major alteration to installations for water supply or sewerage in buildings or within the site,
6. the maintenance of buildings of special conservation value covered by the protection regulations issued under Part 5, Section 7, first paragraph 4 or Section 16, item 4.

Construction work may commence earlier than what is mentioned in the first paragraph if specially permitted by the Building Committee.

The building notification ceases to be valid if work has not commenced within two years from the date of the application.

The demolition of buildings other than ancillary buildings, buildings for agricultural, forestry or similar occupations specified in Part 8, Section 1, second paragraph and buildings specified in Part 8, Section 10, are to be notified to the Building Committee (demolition notification). The regulations in the first and third paragraphs concerning when notification is to be made, when work may commence and when notification ceases to be valid shall also be applied to demolition. *Act (1995:1197)*

**Section 3:** Regulations for building notifications do not concern:

1. proposals involving a one- or two-family dwelling or its ancillary buildings and which, in accordance with Part 8, Section 4, the requirement for a building permit has been waived,
2. the erection or extension or other alteration to buildings for agricultural, forestry or similar occupations within an area not covered by a detailed development plan,
3. proposals concerning installations specified in Part 8, Section 2, second paragraph,
4. proposals as specified in Section 2, first paragraph, items 3 - 5 concerning buildings or sites which belong to the state or the county council or
5. measures which concern buildings or other installations intended for Total Defence and which are secret. *Act (1994:852)*

**Section 4:** A building notification should be made in writing. For simple operations a verbal notification is suitable. The notification shall be accompanied by a description of the type of project and its extent. A demolition notification shall also include a plan concerning how demolition material will be dealt with (demolition plan). In individual cases the Building Committee may decide that a demolition plan need not be submitted. *Act (1995:1197)*

**Section 5:** If the work specified in Section 2, first paragraph, items 1 - 5 which demand building notification refers to premises where employees carry out work for an employer and where it is known for what sort of activity the areas are to be used, the building operations shall not commence before the safety representative, safety committee or organisation which represents the employees have been provided an opportunity to make comments on the measures.

If the construction measures refer to temporary staff accommodation for at least ten persons, then construction work may not commence before the organisations representing the employees have been given the opportunity to make comments. *Act (1994:852)*

**Section 6:** When a building notification has reached the Building Committee then it shall immediately peg out the building, ancillary buildings or installation and mark their height if this is required with regard to site conditions and other circumstances. If the building or installation through its siting is directly adjacent to the boundary of a neighbouring property then the neighbour shall be invited to the pegging-out. *Act (1994:852)*

**Section 7:** When a building notification has reached the Building Committee it must immediately arrange consultations (building consultations) unless this is patently unwarranted. The builder, the person who according to Section 13 has been notified as responsible for quality matters and others determined by the Building Committee shall be invited to the building consultations. Where necessary a labour inspectorate representative shall also be called. If insurance for the building works exists in accordance with the Act (1993:320) concerning Insurance against Building Defects then the Building Committee shall provide the insurers with an opportunity to participate in the consultations.

If the Building Committee considers the building consultation unnecessary it shall immediately inform the builder and simultaneously provide the information included in Section 8, third paragraph.

Building consultations shall always be held when demanded by the builder. *Act (1994:852)*

**Section 8:** In the building consultations there shall be a review of:

1. the planning of the work,
2. the measures for the inspection, supervision and other controls that are necessary for the building or installation so that they can be assumed to meet the requirements of Part 3 and
3. the co-ordination required.

Minutes should be kept of all consultations.

If the Building Committee finds that a project, which it assumed did not demand a building permit, requires a permit from another authority, then the Building Committee shall inform the builder of this matter. *Act (1994:852)*

**Section 9:** During the building consultations or as soon as possible after them, the Building Committee shall, unless it is patently unnecessary, decide on a plan for inspecting the construction works. The inspection plan shall indicate which inspections will take place, what certificates and other documents will be required by the Committee as well as which notifications shall be made to the Committee. The inspection shall be carried out either as a documented inspection, by an independent expert or, if there are special reasons, by the Building Committee.

In accordance with Part 16, Section 7, first paragraph, the Building Committee may also, in cases other than those indicated in the first paragraph, second sentence, carry out the inspection of the building project.

The Building Committee may in connection with an intervention in accordance with Part 10, Section 3, decide on amendments to the inspection plan. *Act (1994:852)*

**Section 10:** When the builder has fulfilled his responsibilities in accordance with the inspection plan and the Building Committee has not found reason to intervene in accordance with Part 10, the Committee shall accordingly issue a certificate (final certificate).

If the Building Committee finds that there are reasons for not issuing a final certificate, the Building Committee shall without delay decide to what extent the building can be used before the defects are rectified. *Act (1994:852)*

**Section 11:** The decisions of the Building Committee concerning building consultations and the inspection plan cease to be valid if the building works have not commenced within two years from the date of the building notification. *Act (1994:852)*

**Section 12:** If insurance for the building works is required as specified in the Act (1993:320) concerning Insurance against Building Defects, the building works may not commence before proof of the insurance is made available to the Building Committee. The same applies to notification about whether a civil defence shelter is required in accordance with Part 6, Section 8 in the Act (1994:1720) on Civil Defence.

In the case where a demolition plan exists in accordance with Section 4, demolition work may not commence until the Building Committee has approved the demolition plan. *Act (1995:1197)*

**Section 13:** For building operations specified in Section 2, first paragraph requiring a building notification as well as demolition work in accordance with a demolition plan, a person responsible for quality matters shall be appointed by the builder. For different parts of a building, different persons may be appointed for quality matters. One of them shall coordinate their tasks. The builder must notify the Building Committee of the person responsible for quality matters.

The person responsible for quality matters shall ensure that the inspection plan in accordance with Section 9 and the demolition plan in accordance with Section 4 are followed and that other controls specified in Section 8, first paragraph, item 2 are carried out. He should be present at the building consultations held in accordance with Section 7 and at all inspections and other controls. *Act (1995:1197)*

**Section 14:** The person responsible for quality matters may only be nominated by a body which has been given national consent (national approval) and is thereby accredited for that purpose according to Section 14 of the Act (1992:1119) on Technical Checks or be a person approved by the Building Committee for specific work. *Act (1994:852)*

**Section 15:** If the Building Committee finds that the person responsible for quality matters has neglected his/her responsibilities, the Building Committee may decide that another person with responsibility for quality matters is appointed. The Committee shall, in the case of the person responsible for quality matters also having national approval, inform the body that has issued the national approval. *Act (1994:852)*

## **Part 10. Penalties and actions resulting from infringements, etc.**

### **Introductory regulations**

**Section 1:** The Building Committee shall raise the question of penalties or actions in accordance with this Part as soon as there is reason to believe that an infringement has taken place with regard to the building regulations in this Act or in any directive or decision which has been issued on the basis of these regulations.

When a measure which requires a building, demolition or site improvement permit has been undertaken without a permit, the Building Committee shall ensure that such works be removed or in other ways rectified, unless the permit can be granted retroactively.

Section 2: If so required, the Building Committee shall provide, with regard to a particular building or other installation, written information about any measure taken which gives rise to action being taken under this Part.

#### Prohibition on continuation of building work, etc.

Section 3: The Building Committee may prohibit the continuation of construction, demolition and site improvement works, or the continuation of a particular measure, if it is obvious that the work or measures conflict with this Act or any regulation or any decision that has been reached in accordance with this Act. The Building Committee may also, if it finds that the builder is not following an important part of the inspection plan, forbid the continuation of building works until the defects that have arisen have been remedied.

If it is obvious that the works or measures referred to in the first paragraph can endanger the stability of a building or otherwise constitute a danger to people's life or health, the Committee shall prohibit the continuation of the work or measures even when the conditions specified in the first paragraph do not exist.

If the Building Committee finds that the builder has considerably deviated from the demolition plan, the Committee may prohibit demolition work until the builder has shown that there are good reasons for the plan being followed.

A prohibition in accordance with the first or second paragraph may be combined with a fine.

Decisions in accordance with this Section take effect immediately. *Act (1995:1197)*

#### Fees

Section 4: If anyone carries out work which would otherwise require a building, demolition or site improvement permit, a building fee shall be levied.

The building fee shall be calculated as four times the fee which, according to the regulations under Part 11, Section 5, would have been payable for a permit for the same measures. The minimum building fee shall be at least SEK 500. When the fee is based on a schedule of charges, regard shall not be had for increases or decreases which according to the schedule of charges are to be observed in particular cases. Nor shall regard be had for amounts which relate to the costs of drawing up a site map, pegging out the site or for checking the position of a building or other survey measures.

If the infringement is minor, a building fee of a lower amount than that specified in the second paragraph may be levied or be completely waived.

Section 5: A building fee shall not be charged if corrections are made before the discussion of penalties and imposition actions under this section by the Building Committee. The building fee shall not be levied also if the measure concerns the demolition of a building and such demolition has already taken place:

1. with the support of an Act or other legislation or was otherwise essential to prevent or contain serious damage to other property or
2. because a considerable part of the building had been damaged by fire or other similar event.



**Section 6:** A special fee shall be charged, in cases other than those specified in Section 4, first paragraph, if an infringement has occurred by:

1. work being carried out without a person responsible for quality matters being present in accordance with Part 9, Section 13,
2. anyone failing to give the Building Committee a building notification or demolition notification, when such a notification is required or
3. work being carried out in conflict with any decision taken by the Building Committee in accordance with this Act.

The special fee shall be at least SEK 200 and a maximum of SEK 1000. If the infringement is only minor, this fee may be waived. *Act (1995:1197)*

**Section 7:** In the cases specified in Section 4, first paragraph, a building fee as well as a supplementary fee shall be charged if the measures involve:

1. the erection of a building,
2. the erection of an extension,
3. a building wholly or in part to be utilised or equipped for a purpose which is substantially different from that for which the building or part of the building was last used or for which a building permit has been granted or
4. the demolition of a building.

The supplementary fee shall not be charged for the cases specified in Section 5. Nor shall the supplementary fee be charged if the illegal measure does not exceed a gross floor area of ten square metres.

The supplementary fee shall be calculated at SEK 500 for each square metre of gross floor area involved. When gross floor areas are calculated, ten square metres should be subtracted from the total.

The fee may be an even lower amount than specified in the third paragraph, or completely waived, if notification about rectification has been received in accordance with Section 14, if rectification has taken place as a result of official assistance or in some other manner or if there are special circumstances.

**Section 8:** Matters concerning building fees and supplementary fees are dealt with by the Building Committee.

Matters concerning supplementary fees are dealt with by the general administrative court at the request of the Building Committee.

Leave to appeal is required if an appeal is made to the administrative court of appeal. *Act (1994:1423)*

**Section 9:** The building fee shall be levied when the infringement was committed and on the owner of the property, building or installation involved in the illegal measure. The special fee shall be levied on the person who committed the infringement.

The supplementary fee shall be levied on

1. the owner of the building where the illegal measure was carried out at the time of the infringement,
2. the person who committed the infringement,
3. on his or her representative and
4. anyone likely to benefit from the infringement.

**Section 10:** If there are two or more owners of the property, building or installation where the illegal measure was carried out, they shall jointly and severally pay the building fee and additional fee in their role as owners.

**Section 11:** If there are special circumstances, the County Administrative Board may reduce or completely waive the building fee or special fee determined by the Building Committee. The question of reduction or waiver shall be considered after an appeal against the Committee's decision has been lodged in accordance with Part 13, Section 2.

**Actions to achieve redress, etc.**

**Section 12:** The district court can be requested for official assistance so that a matter is rectified when anyone:

1. has without a permit undertaken a measure which requires a building, demolition or site improvement permit,
2. has undertaken a measure on the basis of a building, demolition or site improvement permit which has been amended or annulled by a decision which has become legally effective,
3. in any case other than specified in item 1 has undertaken a measure which conflicts with this Act or with any direction or decision made on the basis of this Act or
4. has neglected to carry out work or any measure which has been directed in accordance with Section 15, 16, first paragraph, or 17. *Act (1991:871)*

**Section 13:** Applications for official assistance shall be made by the Building Committee. Regulations on official assistance are contained in the Act (1990:746) on Injunctions to Pay and Official Assistance. *Act (1991:871)*

**Section 14:** In the cases specified in Section 12, items 1 - 3, the Building Committee may, instead of applying for official assistance, direct the owner of the property, building or installation in question to rectify the matter by a specified date. If this direction is not heeded, the Building Committee may request official assistance.

If a directive in accordance with the first paragraph concerns a measure which has been carried out without a required building permit, then the Building Committee may, in its directive, prohibit the measure from being carried out again.

If a building permit, demolition permit or site improvement permit is issued after the prohibition has been issued, the prohibition ceases to be valid.

**Section 15:** If anyone neglects to carry out work or carry out any other measure required by this Act or any other directive or decision made on the basis of this Act, the Building Committee can require the owner to carry out work or those measures within a specified period of time.

**Section 16:** If a building or other installation has been neglected or if it is seriously damaged and has not been repaired within a reasonable period of time, the Building Committee can require the owner to demolish the building or installation within a specified period.

If a building or other installation exhibits defects which can affect the safety of those either within the building or in its vicinity, the Building Committee can prohibit the use of the building or installation. Depending on the circumstances, this prohibition may be directed either to the owner, any person having usufruct rights to the property or to both of these.

Decisions concerning prohibitions on use come into effect immediately and are valid until the Building Committee decides otherwise.

**Section 17:** If a building or other installation within an area covered by a detailed development plan has resulted in considerable inconvenience to traffic safety as a result of

changed conditions, the Building Committee may direct the owner either to remove it or to take other steps. With regard to buildings, however, such a directive can only be issued if the building can be moved or is of little value.

In areas covered by a detailed development plan, the Building Committee can, if this is required with regard to traffic safety, direct the owner of a property or building to erect a fence or alter the way out or any other exit onto a street or road.

If a building or other installation for industrial purposes is no longer in use, the Building Committee may direct that the owner erect a fence around it should this be required as a protection against accidents.

Section 18: Directives in accordance with Section 14, first paragraph, 15, 16, first paragraph, or 17 can be combined with a fine or with the directive that, if the instruction is not followed, the Building Committee may direct that the work is carried out at the owner's expense. A prohibition in accordance with Section 14, second paragraph, Section 16, second paragraph can be combined with a fine.

If a directive involving a measure being carried out at the request of the Building Committee is not followed, the Committee can, unless there is no reason for it, determine that the measure shall be carried out and how this is to take place. In such cases, the Building Committee shall ensure that unreasonable costs are not incurred.

Decisions about a directive in accordance with the first paragraph or decisions in accordance with the second paragraph come into effect immediately.

The Local Enforcement Office shall provide the assistance required to implement a decision in accordance with the second paragraph.

Section 18 a: If the Building Committee in accordance with Part 9, Section 10 decides that a building or part thereof shall not be used until defects are remedied, the Building Committee may combine its decision with a fine. *Act (1994:852)*

Section 19: If a measure which requires a building, demolition or site improvement permit is undertaken without such a permit, and if it is likely that such a permit would be granted, the Building Committee shall, before official assistance is requested or before a directive is issued, provide the owner with an opportunity to apply for such a permit within a specified period of time.

If the application has not been received by the specified date, the Building Committee may, never the less, determine the matter. The Committee may therefore, at the owner's expense, draft plans and schedules as well as carry out all other measures required for the scrutiny of the application.

Section 20: If the Building Committee finds that the maintenance of a building or other installation has been neglected, then the Committee may retain an expert, at the owner's expense, to investigate the need for maintenance work.

**Effects of directives in various situations, etc.**

Section 21: If a directive in accordance with Section 14, first paragraph, 15, 16, first paragraph or 17 or a prohibition in accordance with Section 14, second paragraph, or section 16, second paragraph has been issued against a person as owner of a particular property, and the ownership of the property passes on to someone else, the directive or prohibition instead then affects that person. If the directive or prohibition also includes a fine in accordance with Section 4 of the Fines Act (1985:206) and if the property has been transferred through purchase, exchange or gift, the fine will apply to the new owner from the date of the transfer

on condition that a note of this has been made in accordance with Section 22. Fines which are valid for a limited period of time may only be levied on the person who was the owner at the beginning of that period. Other fines do not apply to the new owner although the Building Committee may determine new fines for the new owner.

The first paragraph is valid even where a directive or a prohibition has been issued to anyone who is a leaseholder or otherwise owner of a building on land which belongs to someone else. Provisions about current fines are only valid in the case of directives or prohibitions which have been issued to someone in their capacity as leaseholder.

In cases concerning directives or prohibitions issued in accordance with the first or second paragraph, the regulations in the Code of Judicial Procedure, on the effects of the object of contention being transferred to someone else and of third person rights, shall apply.

#### **Entry in the land register, etc.**

**Section 22:** The authority which issues a directive or prohibition in accordance with section 21, shall immediately send a notification of its decision to the land registration authority so that this may be noted in the land or leasehold register. If a fine is included in the directive or prohibition then this shall also be noted. The land registration authority shall, by registered mail, immediately inform the person who last sought to register the title deeds or the acquisition of leasehold, if that person does not have the same address as the person to which the directive or prohibition has been issued.

**Section 23:** If a directive or prohibition, which has been noted in accordance with section 22, is revoked then the Building Committee shall immediately inform the land registration authority of this. If a noted directive or prohibition has become void as a result of a decision which has become legally effective or has ceased to be valid, or if the directive has been complied with, the Building Committee shall, as soon as it has received information about this, notify the land registration authority of this matter.

**Section 24:** If the Building Committee neglects to notify in accordance with section 23, it will be the responsibility of the County Administrative Board to do this should anyone whose rights are involved so request.

#### **Other regulations**

**Section 25:** If property on which any work specified in Section 4, first paragraph, has been carried out for payment and if there is to be rectification in accordance with a decision based on that Section, then Part 4, Section 12 of the Code of Land Laws shall apply, unless the previous owner has informed the new owner of this work, or the new owner has either known or not known about this measure.

**Section 26:** A building fee or special fee is paid to the municipality. A supplementary fee is paid to the state.

**Section 27:** If the question of the type of infringement specified in Section 4, first paragraph has not been discussed by the Building Committee within ten years of the date of the infringement, no building fee or supplementary fee may be levied. This is also the case with the special fee. However, in this case the period is reduced to three years.

When ten years have elapsed since a date on which a measure described in Section 12, items 1 - 3 has been carried out, the Building Committee may not make an application for official assistance or issue a directive under Section 14, first paragraph. This shall not apply when someone acting in contravention of Part 8, Section 1, first paragraph, item 3, has without a permit occupied or equipped a dwelling for other than residential purposes.  
*Act (1989:1049)*

**Section 28:** Information about a decision or decree which involves someone being charged a fee in accordance with this Part, shall be sent immediately to the County Administrative Board. The fee shall be payable to the County Administrative Board within two months of the decision or decree becoming legally effective. Information about this shall be given in the decision or judgement.

**Section 29:** If the fee is not paid within the period specified in section 28, the unpaid fee together with an additional charge, calculated in accordance with Section 58, items 2 - 5, of the Collection of Revenue Act (1953:272), shall be recovered. The government shall determine whether the recovery of a small amount is unnecessary. Regulations about collection are contained in the Act (1993:891) on the Collection of State Claims, etc. The claims shall be made in accordance with the Debt Recovery Code.

With regard to the funds received and their division between the state and the municipality, the funds shall in the first place be allocated to the municipality. *Act (1993:911)*

**Section 30:** Fines which have been imposed in accordance with this Part may not be transformed into a prison sentence.

## Part 11. The Building Committee

**Section 1:** In addition to the tasks of the Building Committee in accordance with this Act, the Committee shall:

1. encourage good architecture as well as a good urban and rural environment,
2. actively follow general developments in the municipality and its immediate surroundings as well as take the initiatives required in matters concerning the drafting of plans and building and property formation,
3. co-operate with authorities, organisations and individuals whose work and interests are concerned with the Committee's activities,
4. give advice and information on matters which concern the Committee's activities and
5. ensure that this Act, and any directives and decisions based on it, are followed.

The Building Committee shall utilise the opportunities provided by this Act to simplify and facilitate matters for private individuals and shall also ensure that the directives concerning restrictions in building permits are followed.

**Section 2:** If required, the Building Committee shall provide written information about the drafting of plans and building and property formation.

If a site map is required for the assessment of a building permit for an area of more continuous development, the Building Committee shall provide such a map if the applicant so requests.

**Section 3:** What is specified in the Municipality Act (1991:900) regarding committees also applies to a Building Committee.

Delegated tasks in accordance with Part 6, Section 33, of the Municipality Act shall confer the right to:

1. determine issues which are a question of principle or otherwise are of great importance,
2. issue directives or prohibitions involving fines except in those cases specified in Part 10, Sections 3 and 16, second paragraph or issue a directive stating that a measure will be carried out by the Building Committee at the expense of the applicant or
3. determine matters concerning fees in accordance with Part 10. *Act (1991:1703)*

Section 4: The Building Committee shall be served by at least one person with architectural training and shall also have access to personnel with the competence required to carry out the Committee's tasks in a satisfactory manner.

Section 5: The Building Committee may charge a fee for any matter concerning a building permit, tentative approval, a building notification or demolition notification in accordance with Part 9, Section 2, as well as in other cases which require the production of a site map, the scrutiny of drawings, inspections, the production of archive documents or other time- and expense-consuming efforts.

In addition, the Building Committee may, on receipt of a building notification concerning the measures specified in Part 9, Section 2, first paragraph, items 1 or 2, affecting the erection, extension or modernisation of a building or other installation, levy a planning fee to cover the costs of the measures which in accordance with this Act are required to draft or amend detailed development plans, area regulations or property regulation plans. The planning fee may only be charged if the property owner has use of the plan or regulations.

The maximum fee which may be levied is that which corresponds to the municipality's average cost for this task. The basis on which charges are calculated shall be stated in a schedule of charges which is agreed upon by the municipal council.

Fees are charged to the applicant and payment can be requested in advance.  
*Act (1995:1197)*

## Part 12. State control of areas of national interest, etc.

Section 1: The County Administrative Board shall scrutinise a municipality's decision to adopt, amend or annul a detailed development plan or area regulations, if there is a risk that the decision involves:

1. a national interest, in accordance with the Act (1987:12) on the Management of Natural Resources, etc. not being taken into consideration,
2. the regulation of matters concerning the use of land and water areas which are of concern to several municipalities without their being co-ordinated in an appropriate manner or
3. a particular development that is inappropriate with regard to the health of residents and others or the need for protection against accidents.

Section 2: The County Administrative Board shall, within three weeks of receiving notification of the municipality's decision, determine whether scrutiny in accordance with Section 1 shall be carried out or not.

Section 3: The County Administrative Board shall annul a municipality's decision in its entirety if any of the situations specified in Section 1 has arisen. If the municipality has agreed to it, the decision may be annulled in part.

**Section 4:** If there are special reasons, the County Administrative Board or the government may determine that, for a particular area, Sections 1 - 3 may apply to decisions to issue a permit or tentative approval.

If the County Administrative Board, after notification in accordance with the first paragraph has been issued, has decided that a permit or tentative approval shall be scrutinised, it may determine that a permit or tentative approval shall not be valid until the scrutiny has been completed.

**Section 5:** The government may scrutinise a decision to adopt, amend or annul a regional plan. A decision to scrutinise the plan shall be reached within three months of the government's receipt of notification. The government's scrutiny may only consider to what extent national interests in accordance with the Act (1987:12) on the Management of Natural Resources, etc. have been taken into consideration.

The government may annul the decision either wholly or in part.

**Section 6:** The government may direct a municipality, within a stipulated period, to amend or annul a detailed development plan or area regulations (a planning injunction) if this is required to meet the interests specified in Section 1, items 1 and 2.

**Section 7:** If a municipality does not observe the planning injunction, the government may, at the municipality's expense, produce the necessary proposals and adopt, amend or annul a detailed development plan or area regulations. The County Administrative Board shall thereby take over responsibility for the matter.

## Part 13. Appeals

**Section 1:** Appeals may be lodged against decisions made in accordance with this Act, if they follow the regulations in Part 10 of the Municipality Act (1991:900) and concern:

1. a municipal council's decision regarding a comprehensive plan,
2. a municipal council's decision requiring a municipal committee to adopt, amend or annul a detailed development plan or area regulations or to decide on a property owner's responsibility to pay the costs for streets or other public spaces or to decide on the general conditions for such charges,
3. decisions of a municipal council or committee concerning the decision not to adopt, amend or annul a detailed development plan, area regulations or a property regulation plan,
4. decisions of a municipal council or committee concerning the basis for responsibility with regard to the payment of the costs for streets or other public spaces and the general conditions for such charges,
5. a municipal council's decision regarding the charges for matters being dealt with by the Building Committee or
6. a municipal federation's or a regional planning federation's decision regarding a regional plan.

Other decisions concerning street costs, over and above those specified in Section 4, first paragraph, cannot be appealed against. Disagreements concerning street costs are dealt with by the Lands Tribunal as specified in Part 15, Section 8. *Act (1991:1703)*

**Section 2:** Other decisions in accordance with this act by a municipal council or a municipal committee, other than those referred to under section 1, can be appealed against to the County Administrative Board.

However, such decisions may not be appealed against if they only concern

1. matters that have already been determined by a detailed development plan, area regulations or tentative approval or
2. the need for building consultation. *Act (1995:1197)*

**Section 3:** Regulations concerning appeals specified in Section 2 are contained in Sections 23-25 in the Act on Administrative Procedures (1986:223).

The date when an appeal against a decision to adopt, amend or annul a detailed development plan, area regulations or a property plan is lodged, however, is calculated from the date when the minutes of the variation were posted on the municipality's notice-board. When such a decision has been taken by the municipal council, then what is specified in Sections 23-25 of the Act on Administrative Procedures about the authority which has issued the decision will instead refer to the Municipal Council. *Act (1995:1197)*

**Section 4:** A decision of the County Administrative Board made in accordance with Part 12, Section 2 concerning whether scrutiny is to take place or not or that Board's determination in accordance with Part 12, Section 4, first paragraph or Part 12, Section 4, second paragraph that a permit or tentative approval is not valid, cannot be appealed against.

Other decisions of the County Administrative Board, other than those specified in the first paragraph in accordance with this Act, can be appealed against to the Administrative Court of Appeal if the decision concerns:

1. a building permit or tentative approval in an area covered by a detailed development plan,
2. a building permit or tentative approval in an area not covered by a detailed development plan and the appeal concerns the issue of whether a particular measure is to be regarded as an addition as defined in Part 8, Section 13 or as fulfilling the requirements under Part 3 or as conflicting with area regulations,
3. a demolition or site improvement permit and the appeal concerns the issue of whether the measures are in conflict with a detailed development plan or area regulations,
4. a directive in accordance with Part 6, Section 19, to relinquish or give up land or in accordance with Part 6, Section 22 regarding the obligation to pay for the construction of roads and streets as well as installations for water supply and sewerage,
5. a matter specified in Part 9,
6. a penalty or actions specified in Part 10 or
7. the payment of fees specified in Part 11, Section 5 or payments to the government in other cases. *Act (1995:1730)*

**Section 5:** A decision to adopt, amend or annul a detailed development plan, a tentative approval, area regulations or a property regulation plan may be appealed against only by those who, before the end of the publicity period, have made written representations which have not been taken into consideration. If the regulations for simplified plan approval procedures have been employed, a decision may only be appealed against by those persons specified in Part 5, Section 28, have put forward their points of view and these have not been taken into consideration.

If a plan, subsequent to its display or, when regulations concerning simplified plan approval procedures have been applied, subsequent to notification in accordance with Part 5, Section 28, second paragraph, is then amended to someone's disadvantage, he/she may, irrespective of the regulations in the first paragraph of that section, appeal against the decision. Nor do the regulations in the first paragraph prevent an appeal against a decision which has not been reached according to the regulations prescribed by law.



**Section 6:** *Repealed by Act (1994:819)*

**Section 7:** A decision concerning a permit or tentative approval within a protected or safeguarded area referred to under Part 8, Section 9, third paragraph may only be appealed against by the National Civil Aviation Administration if the decision concerns a civil airport or by the supervising authority if the decision affects a nuclear reactor or other nuclear energy facility or by the Supreme Commander of the Armed Forces, the National Board of Civil Emergency Preparedness or the National Rescue Service Board or the authorities appointed by them in other cases. *Act (1994:852)*

**Section 8:** The authority having responsibility for scrutinising an appeal against a decision to adopt, amend or annul a detailed development plan, area regulations or a property regulation plan shall either ratify or dismiss the decision in its entirety. If the municipality has so agreed, the decision may be dismissed in part or completely. If the municipality has so agreed, the decision may be annulled in part or amended in another way. Amendments of a minor character may be made without the municipality's permission.

At the municipality's request, the authority can determine that the decision which has been appealed against, regardless of the fact that the appeal has not been completely determined, may be implemented for those areas which are patently not affected by the appeal. Such a determination cannot be appealed against. *Act (1995:1197)*

## **Part 14. Obligations to acquire land and pay compensation**

### **Acquisition**

**Section 1:** With regard to any land which, according to a detailed development plan is to be used for public space and for which the municipality is responsible, as well as other land which according to the plan is to be used for purposes other than private development, the municipality is obliged to acquire such land should the property owner so request. If land is reserved in the plan for public space for which a body other than the municipality is responsible, then the road authority is obliged to acquire that land either as freehold land, for usufruct rights or for any other special right should the property owner so request. The road authority may determine whether acquisition will involve freehold rights, usufruct rights or other special rights.

If the detailed development plan permits the temporary use of land, the first paragraph shall not be applied to land during the period that such temporary use is permitted.

With regard to land which is located within a joint development area as defined by the Act (1987:11) on Joint Land Development, special regulations apply.

**Section 2:** If a detailed development plan includes a regulation that land reserved for private development is also to be used for a public road, for a road which jointly serves several properties or for a public utility, then the organisation responsible for this installation shall acquire usufruct or other special rights to the extent necessary for this purpose and if the property owners so request. The organisation etc., responsible shall decide which rights the acquisition shall apply to.

## Compensation and compulsory acquisition in selected cases

**Section 3:** If the Building Committee has, on the basis of Part 10, Section 17, determined that a building or other installation is to be removed or subjected to other measures, or that an exit or other drive is to be altered, the owner is entitled to compensation from the municipality for the damage involved.

**Section 4:** If an area which, according to a detailed development plan has been reserved for a public highway and, after the implementation of a new plan, has been completely or in part used for other purposes or altered with regard to height and thereby involves damage to a property adjacent to the area or otherwise affects the special rights of a property owner, then such an owner is entitled to compensation from the road authority.

**Section 5:** If a detailed development plan is amended or annulled before the implementation period has elapsed, the owner of a property and the holder of special rights to a property are entitled to compensation from the municipality for any damage incurred.

If the amendment or annulment causes considerable damage with regard to the use of a property to be incurred, the municipality is liable to acquire the property if the owner so desires.

If a detailed development plan is amended or annulled after the implementation period has elapsed, the first and second paragraphs shall still apply if a building permit has been applied for and the application has not been determined before the implementation period has elapsed.

**Section 6:** If damage has occurred as a result of the measures specified in Part 16, Section 7, the injured party has the right to compensation from the municipality or, if the measures have been carried out at the request of a state authority, from the state.

**Section 7:** If the costs of streets have been paid in accordance with Part 6, Section 31 or 32, or in accordance with similar older regulations, the municipality is responsible for paying back such costs if the owner of a property, because a building permit has been refused, is not able to use the property as envisaged when the costs were paid.

A municipality is also responsible for paying interest in accordance with Section 5 of the Interest Act (1975:635) from the day on which the property owner made the payment.

*Act (1989:1049)*

**Section 8:** The owner or holder of special rights to a property is entitled to compensation from the municipality if damage has occurred as a result of:

1. a building permit being refused for the replacement of a demolished or accidentally destroyed building with a basically similar one where the application for a building permit has been made within five years of the date on which the building was demolished or destroyed,

2. demolition being prohibited under the detailed development plan or area regulations or demolition permits being refused on the basis of Part 8, Section 16, items 2 or 3,

3. the protective regulations being given for buildings in detailed development plans as specified in Part 5, Section 7, first paragraph, item 4 or 6 or in area regulations as specified in Part 5, Section 16, items 4 or 5,

4. regulations about vegetation, site design or height within areas specified in Part 8, Section 9, third paragraph being included in the area regulations or

5. a site improvement permit being refused on the basis of Part 8, Section 18, first paragraph, items 2 or 3.

The right to compensation exists in the cases specified in the first paragraph, item 1 if the building has been destroyed by accident. In other cases to which the first paragraph, item 1 applies as well as in those covered by the first paragraph, item 2, the right to compensation exists if the damage is considerable with regard to the value of that part of the property affected. In cases covered by the first paragraph, items 3 - 5, the right to compensation exists if the damage means that the existing use of the site is considerably impaired within the affected part of the property.

If decisions of the type specified in the first paragraph involve considerable disadvantage with regard to the use of the property, the municipality shall acquire the property if the owner so requests.

When applying the second and third paragraphs, consideration shall also be given to other decisions specified in the first paragraph as well as decisions specified in Part 3, Section 2 of the Act (1988:950) on Historical Monuments, etc., Sections 5, 8, 9, 11 and 19 of the Nature Conservancy Act (1964:822), prohibitions according to Section 20, second paragraph and Section 21, second paragraph in the same Act, and decisions specified in Section 18, second and third paragraphs of the Forest Protection Act (1979:429) and Part 19, Section 2, in the Water Act (1983:291), on condition that notice of the decision is given within ten years of the latest decision. In addition consideration shall be given to the impact of Section 30 of the Forest Protection Act which in particular cases have come into force within the same period. If the right to appeal or the right to compensation for compulsory purchase as a result of the above mentioned-decisions has been lost as a result of regulations in Part 15, Section 4, or similar regulations in the Historical Monuments, etc., Nature Conservancy or Water Acts, this should not act as a constraint on consideration being given to the decision.

If a municipality, subsequent to a decision in accordance with Part 12, Section 6, has decided to issue a demolition prohibition or enact the protective regulations referred to in the first paragraph 2 or 3, in order to satisfy a national interest in accordance with the Act (1987:12) on the Management of Natural Resources, etc., then the state is responsible for compensating the municipality for its costs for compensation or acquisition. In cases which are covered by the first paragraph, items 4 and 5, the owner of an installation, for which protected or safeguarded areas have been determined, will be responsible for paying the municipality's costs for compensation or acquisition. *Act (1995:1197).*

### Calculation of compensation

**Section 9:** When determining the compensation to be paid in cases falling under Sections 1 - 8, then Part 4 of the Expropriation Act (1972:719) shall apply unless otherwise covered by Section 10. What is specified in Part 4, Section 3 of the above-mentioned Act shall also apply to matters involving an increase in value that has occurred during the period of ten years prior to the date when a demand for compensation was made.

**Section 10:** Compensation for the reduction in a property's market value in the cases covered by Section 3, 4, 5, first paragraph or Section 8, first paragraph shall be determined as the difference between the property's market value before and after the decision or the measure specified in Section 4. In this context, no consideration will be given to expected changes in land use.

Compensation for damage in cases specified in Section 8, first paragraph, items 1 and 2, shall be reduced by the amount corresponding to what, on the basis of Section 8, second paragraph, can be regarded as acceptable without compensation being paid.

## Part 15. Court decisions, etc.

Section 1: Assuming that conflicting regulations are not included in this Act, then, additionally, what is included in Part 6, Section 39 and Part 14, Section 9 of the Expropriation Act (1972:719) shall apply to cases concerning:

1. acquisition in accordance with Part 6, Sections 17 or 24 or
2. compensation for compulsory acquisition or acquisition of usufruct or other special rights in cases specified in Part 14, Sections 1 - 8.

Section 2: Claims concerning acquisitions in accordance with Part 6, Section 17 may be raised even though the decision to adopt a detailed development plan has not become legally effective.

Section 3: Claims concerning acquisitions in accordance with Part 6, Section 24, second paragraph shall be raised within three years of the elapsing implementation period.

If an application has been made to lengthen the implementation period or if the municipality is considering renewing the implementation period, the case shall be regarded as pending until this matter has been finalised. If the implementation period is extended or renewed, the municipality's claim will become void.

The regulations in the second paragraph concerning a pending situation will also apply to cases where a claim concerning acquisition has been made in accordance with Part 6, Section 24, first paragraph and an application has been for the formation of a property in accordance with the property regulation plan. If a property is formed in accordance with the property regulation plan, the municipality's claim will become void.

When a municipality has made a claim concerning acquisition in accordance with Part 6, Section 24, first paragraph, the Lands Tribunal shall immediately inform the property formation body about this matter. *Act (1995:1412)*

Section 4: In cases specified in Part 14, Section 3, 5, 7 or 8 claims concerning decisions must be made within two years of the date of the decision becoming legally effective.

In the cases specified in Part 14, Sections 4 or 6, claims shall be made within two years of the date on which the measure was implemented.

However, claims may be made later than is stated in the first and second paragraphs, if the damage could not reasonably be foreseen within the specified periods.

Section 5: Compensation for damages in accordance with Part 14, Sections 3 - 6 or 8, shall be determined as an amount of money to be paid either once as a lump sum or, if there are special circumstances, as a certain amount of money per annum. If circumstances change, the annual amount should be revised if the municipality, the property owner or the holder of special rights to the property so requests.

If the municipality so demands, and it is not patently unreasonable, the court shall decree that compensation, in accordance with part 14, section 8, first paragraph, items 2 and 3, shall not be paid unless certain measures have been carried out on the building.

With regard to compensation, whatever has been agreed or assumed to have been agreed between the municipality and the property owner or the holder of special rights to a property, will also apply to the new owner of the property or the new holder of special rights.

Section 6: If it has been found that a claim made by a property owner, or the holder of special rights to a property, in accordance with section 1, is not valid then the court may determine that the claimant shall pay his/her own costs if the case has been referred to the court without sufficient cause. If the case has clearly been initiated without reasonable grounds, the court will also order the claimant to pay the respondent's costs.

Section 7: If compensation determined by a court in connection with an acquisition case has not been reduced in the manner prescribed in the Expropriation Act (1972:719), then the following will apply. If someone who is entitled to compensation demands its payment, the question of giving up the land will lapse with regard to his/her rights, provided that the land has not been taken into possession or transferred in accordance with Part 6, Section 10 of the Expropriation Act.

Section 8: Disputes between a municipality and a property owner concerning the payment of costs for streets or public spaces as well as disputes about the conditions of payment shall be taken up by the Lands Tribunal in whose district the property is located.

In the cases specified in the first paragraph, the regulations in the Act (1969:246) on Property Cases will be applied. In cases where compensation is reduced in accordance with Part 6, Section 33, the matter of court costs will be regulated in accordance with the Expropriation Act (1972:719). If a property owner loses such a case, the court can determine that he/she will pay for his/her own costs if the claim is based on insufficient grounds. If his/her claim has obviously lacked reasonable grounds, the court may in addition determine that the claimant pay the municipality's costs. *Act (1987:246).*

## Part 16. Authorisation, etc.

Section 1: The government or the authority appointed by the government will issue regulations concerning the requirements for buildings, etc. which, in addition to those mentioned in Part 3 will also include those needed:

1. to protect life, personal safety or health,
2. for the suitable design of buildings and other installations as well as sites and public spaces and
3. for the enforcement of the regulations in item 1.

The government or the authority appointed by the government shall determine the necessary regulations regarding persons responsible for building quality in addition to those specified in Part 9, Sections 13 - 15.

The government or the body appointed by the government may in individual cases permit exceptions from the regulations specified in Part 3. *Act (1994:852)*

Section 2: *Repealed by Act (1994:852)*

Section 3: *Repealed by Act (1994:852)*

Section 4: If the nation is at war or there is danger of war breaking out or if there exist such exceptional circumstances resulting from war or the danger of war, the government may issue regulations that differ from those in this Act, particularly those of importance to Total Defence or otherwise required for necessary building operations to take place.

**Section 5:** With regard to leasehold property, the provisions of this Act regarding the property owner or the property shall also be applied to a leaseholder or leasehold property, with the exception that a leaseholder is not responsible for paying the costs of streets and other public spaces.

**Section 6:** Anyone who occupies property as a result of permanent occupation or entailed estate rights or the provisions of a will but without having ownership rights, shall be regarded for the purposes of this Act as the owner of the property.

**Section 7:** In order to carry out their tasks in accordance with this Act, the Building Committee and the County Administrative Board as well as those who carry out work at their request, are entitled to gain access to properties, buildings and other installations as well as to carry out measures which are necessary for the performance of their tasks.

The rights specified in the first paragraph also apply, and in situations other than those noted above, to those carrying out public survey work.

The police authorities shall provide assistance when required.

## Part 17. Provisional regulations

### The coming into force, etc.

**Section 1:** This Act comes into force on the 1st July 1987.

Within the limitations noted in this Part, this Act repeals the Building Act (1947:385), the Building Statutes (1959:612), the Act (1976:666) on the Consequences and Interventions Ensuing from Unlawful Development, etc, and the Act (1976:296) on Alternative Emergency Fuels, etc.

**Section 2:** Before the 1st July 1990, every municipality shall have adopted a comprehensive plan in accordance with Part 4.

Until there is a valid comprehensive plan for a municipality, decisions based on Part 5, Sections 16 and 28, first paragraph must refer to a similar comprehensive plan which, before it has become legally effective, has been approved by the municipal council. *Act (1987:122).*

### Master plans, etc.

**Section 3:** Ratified master plans will be valid as area regulations as defined in this Act.

Claims for compensation or acquisition in accordance with Section 22 of the Building Act (1947:385) shall, in cases other than those specified in Section 15, second paragraph of this Part, be made before the end of June 1988. In such cases scrutiny will be based on the earlier regulations.

Older outline plans will cease to be valid this Act comes into force.

### Detailed development plans, rural development plans, parcelling plans, etc.

**Section 4:** Detailed development plans and rural development plans in accordance with the Building Act (1947:385) or the Town Planning Act (1931:142), older types of plans and regulations referred to in Sections 79 and 83 of the latter act as well as parcelling plans, which are not covered by a directive in accordance with Section 168 of the Building Act, shall be regarded as a detailed development plan adopted in accordance with this Act. Parcelling

plans, to the extent that they are covered by the above-mentioned directives, will cease to be valid when this Act comes into force.

With regard to detailed development plans and rural development plans which have been ratified before the end of 1978, the implementation period will be defined, in accordance with Part 5, Section 5, as five years from the date of their becoming legally effective. For other plans and regulations referred to in the first paragraph, the implementation period will be regarded as having elapsed.

Unless otherwise prescribed in a plan or regulation which, according to the first paragraph is to be regarded as a detailed development plan in accordance with this Act, then Section 39 in the Building Statutes (1959:612) shall apply as a regulation in the plan.  
*Act (1991:604)*

Section 5: During the period up to the end of June 1991, the regulations in Part 14, Section 1, do not apply to areas covered by a detailed development plan. Instead during that period in the regulations of Section 48, first and third paragraphs of the Building Act (1947:385) will apply.

The regulations in Part 6, Section 24, second paragraph do not apply to plans whose implementation period, in accordance with Section 4, second paragraph, can be regarded as having elapsed.

Section 6: Regulations in Part 6, Section 26, first paragraph do not apply to areas covered by a rural development plan or a parcelling plan.

Section 7: Regulations in Part 8, Section 11, fourth paragraph do not apply to areas covered by earlier forms of detailed development plan or a rural development plan.

Section 8: If damage occurs as a result of a plan or regulation whose implementation period in accordance with Section 4 has elapsed, or which is amended or annulled, the owner and holder of special rights to a property are entitled to compensation from the municipality on condition that:

1. the property is located in an area which is developed predominantly in accordance with the plan or area regulations,
2. notice about the decision regarding the amendment or annulment of the plan or regulations is given before the end of June 1992 and
3. the property after such amendment or annulment may either not be built upon or only be used for development to an extent which is obviously unreasonable.

If the plan or regulation is amended or annulled before the end of June 1992, then the first paragraph will apply if an application has been made for a building permit but the application has not been dealt with before the above-mentioned date.

Compensation shall be calculated as the difference between the property's market value before and after the decision to amend or annul the plan. The property's market value before the decision shall be calculated with regard to planning conditions as well as the current compensation principles at the time when this Act comes into force. If the municipality so demands, however, the value must not be set at a higher amount than that included in the regulations in Section 36 of the Municipal Taxation Act (1928:370) as formulated at the end of June 1990 and this will be deductible when calculating the capital gain from the sale of a property by 31 December 1990, adjusted by the percentage by which the basic value according to the General Insurance Act (1962:381) has been changed by the date of sale.

Claims for compensation in accordance with the first paragraph shall be submitted within two years of the date of the decision which is being appealed against becoming legally effective. If the property owner or the holder of special rights to a property has submitted a

claim and is entitled to compensation, the municipality shall instead acquire the property or the special rights to the property.

In cases concerning compensation and acquisition, the regulations in Part 14, Section 9 as well as Part 15, Sections 1 and 6, shall also apply. *Act (1991:604)*.

**Section 9:** With regard to detailed development plans and rural development plans which have been adopted but not ratified before this Act comes into force, the earlier regulations concerning procedures and the scrutiny of plans shall apply.

### **Regional plans**

**Section 10:** Regional plans which have been ratified before the end of June 1982 shall continue to be valid as regional plans in accordance with this Act, but for no longer than six years from the date on which the plan was ratified. In other circumstances, regional plans will cease to exist when this Act comes into force.

### **Plot subdivision**

**Section 11:** Plot subdivision in accordance with the Building Act (1947:385) or the Town Planning Act (1931:142) as well as older plot subdivisions specified in Section 80 of the last mentioned Act, shall be regarded as the same as a property regulation plan in accordance with this Act.

**Section 12:** For plot subdivisions which have been adopted but not ratified before this Act comes into force, older regulations shall apply with regard to procedures such as the scrutiny of applications.

### **Prohibitions on new construction**

**Section 13:** With the exceptions specified in Sections 14 and 16, prohibitions on new construction and prohibitions against demolition which have been issued in accordance with the Building Act (1947:385), will cease to be valid when this Act comes into force.

**Section 14:** If a prohibition on new construction has been issued on the basis of Section 110, second paragraph of the Building Act (1947:385), the prohibition shall continue to be valid as a planning regulation in accordance with Part 5, Section 8, item 1 of this Act.

**Section 15:** Prohibitions in accordance with Section 17 in the Building Act (1947:385) concerning excavations, infilling, tree-felling or other comparable measures shall continue to be valid, but only up to the end of June 1990.

Claims for compensation or acquisition in accordance with Section 22 of the Building Act and as a result of a prohibition in accordance with the above paragraph, shall be made before the end of June 1991. In such cases, scrutiny shall be based on the older regulations.

**Section 16:** For areas covered by a prohibition on new construction, etc. issued in accordance with Section 81 of the Building Act (1947:385) or issued on the basis of Section 82 of the same Act, shall be regarded as if the scrutiny specified in Part 12, Section 4 has taken place with regard to matters involving building permits, site improvement permits and tentative approvals.

In areas covered by regulations in accordance with Section 54, sub-section 1, third paragraph of the Building Statutes (1959:612), there is a responsibility in accordance with



Part 8, Section 7, to seek a building permit for the erection of or considerable alteration to illuminated signs and in accordance with Part 8, Section 9 to seek a site improvement permit for excavation and infill works.

Claims for compensation or acquisition as a result of a prohibition specified in the first paragraph shall be made before the end of June 1988. In such cases, scrutiny shall be based on the older regulations.

**Section 17:** In areas covered by a prohibition issued in accordance with Section 40, second paragraph or Section 110, fourth paragraph of the Building Act (1947:385) against excavation, infilling, tree-felling or other comparable measures, a site improvement permit is now required for such measures in accordance with Part 8, Section 9.

#### Other decisions in accordance with the Building Act

**Section 18:** If an exception has been made regarding a prohibition on new construction in accordance with the Building Act (1947:385) or the Building Statutes (1959:612) as a result of a decision which has become legally effective after the end of June 1986 and if a building permit for the measure concerned has not been issued before this Act comes into force, then this permission shall be regarded as a tentative approval. This approval will cease to be valid unless an application for a building permit is made within two years of the date on which the approval became legally effective.

If a property formation decision has been made in accordance with the Property Formation Act (1970:988), or a jointly owned property has been created in accordance with the Act (1973:1149) on Civil Engineering Works, or a utility easement has come into being in accordance with the Act (1973:1144) on Utility Easements and has been issued with the exception to the prohibition referred to in the first paragraph, and if for the decision to be effective, a building permit is required, then the decision is the same as a tentative approval. However, the tentative approval will cease to be valid unless an application for a building permit has been made within two years of the date on which the decision became legally valid. Under the same conditions and time limits, a decision will also be binding with regard to the scrutiny of applications for demolition and site improvement permits.

In other cases the decision about exception will cease to be valid. *Act (1987:122).*

**Section 18 a:** The Building Committee may, in cases where a building permit is concerned, explain that new development or property formation that has been carried out contrary to the regulations in the detailed development plan, rural development plan, parcelling plan or plot subdivision plan and, in accordance with Section 34, 38, third paragraph or 110, first paragraph of the Building Act (1947:385) or similar older regulations or Part 3, Section 2, third paragraph of the Property Formation Act, according to its wording in June 1987, shall be regarded as the type of deviation referred to in Part 8, Section 11, first paragraph, item 2 b. This type of explanation shall refer only to minor deviations from the plan or parcelling plan and which are compatible with the aims of these plans. This explanation shall only be used in connection with the approval of an application for a building permit.

The first paragraph shall also be applied to matters concerning a property, building or other installation to the extent that, after a decision concerning the ratification of a detailed development plan, a building plan or parcelling plan, it deviates from the plan or the plot subdivision. *Act (1989:1049)*

**Section 19:** Decisions in accordance with Sections 70 and 113 in the Building Act (1947:385) concerning the responsibility to surrender or release land, shall be regarded as the same as a directive in accordance with Part 6, Section 19 of this Act. The directions contained in

Section 73 of the Building Act shall be regarded as the same as the regulations in Part 6, Section 22 of this Act.

### **Particular requirements for existing buildings**

**Section 20:** Buildings erected before 1 July 1960 or for which a building permit was approved prior to that date, shall be provided with an installation to facilitate the inspection of the roof and an installation to prevent falls from it.

With regard to buildings erected before 1 July 1974 or for which a building permit was applied for prior to that date, doors and similar installations shall be constructed so that the risk of accidents does not arise.

For buildings erected before 1 July 1977 or for which a building permit was approved prior to that date, appropriate installations shall be provided to ensure acceptable working conditions for persons collecting household refuse.

The requirements specified in the first to third paragraphs should not significantly deviate from what could be required according to corresponding older regulations.

**Section 21:** The regulations in section 82 a, third paragraph, of the Building Statutes (1959:612) regarding the adaptation of buildings to the handicapped will still apply.

**Section 22:** The Government, or the authority appointed by the Government, shall with regard to Sections 20 and 21, issue further directions required for the:

1. protection of life, personal safety and health and
2. suitable design of buildings and other installations as well as sites and public spaces.

### **Consequences, etc.**

**Section 23:** For infringements that have occurred before these regulations come into force, the existing Act (1976:666) on the Consequences and Interventions ensuing from Unlawful Development, etc. shall apply. However, the regulations in Section 10 shall apply if these are less onerous.

If anyone omits to carry out work or other measures which have been ordered as a result of a decision in accordance with the Building Statutes (1959:612), then the regulations in Part 10 shall apply in an action before a court.

If anyone has omitted to follow a condition or requirement in accordance with Section 136 a of the Building Act (1947:385), then the regulations in Part 4, Section 6 of the Act (1987:12) on the Management of Natural Resources, etc. shall apply.

### **Street costs, etc.**

**Section 24:** Older regulations concerning responsibility to pay for street sites and street construction costs shall apply to street construction works commenced before this Act comes into force.

### **Ongoing court cases and issues, etc.**

**Section 25:** With regard to matters being dealt with in accordance with the Building Act (1947:385) or the Building Statutes (1959:612) and which the Building Committee has dealt with before this Act comes into force, then older regulations shall apply with regard to procedures as well as to the examination of applications.

With regard to cases which, in accordance with the Building Act, concern the payment of compensation or of compulsory purchase and for which a demand was made before this Act comes into force, then older regulations shall apply when determining the outcome of such an issue.

**Section 26:** The regulations in Sections 60 - 64 of the Building Statutes (1959:612) shall apply to construction works for which building permits have been approved in accordance with the Building Statutes.

**Section 27:** What is decreed by law or other regulations regarding a town plan shall instead refer to a detailed development plan in which a municipality is responsible for public space. What is decreed regarding a rural development plan shall refer to a detailed development plan in which someone other than the municipality is responsible for public space. What has previously been referred to as a building permit shall now - with regard to the type of activity involved - be variously referred to as a building permit, a demolition permit or a site improvement permit.







## Southern Öland (Sweden)

No 968

### Identification

<i>Nomination</i>	Södra Ölands Odlingslandskap (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 *leding*, 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

## Sud d'Öland (Suède)

No 968

### Identification

*Bien proposé* Le paysage agricole du sud d'Öland

*Lieu* Comté de Kalmar

*État partie* Suède

*Date* 23 juin 1999

### Justification émanant de l'État partie

L'interaction entre l'homme et l'environnement naturel dans le sud de l'île d'Öland est d'une valeur universelle exceptionnelle. Dès l'âge de la pierre, l'agrosystème se met en place, à partir du moment où l'homme devient agriculteur et commence à exploiter ce site. Depuis lors, l'utilisation des sols n'a quasiment pas changé, les principales activités économiques demeurant l'exploitation des terres arables et l'élevage.

Ce sont les conditions géographiques qui dictent aux insulaires la manière de mettre le site en valeur. Le parcellaire est clairement discernable ; la distinction entre l'*infield* et l'*outfield* est immédiatement perceptible et elle est constante depuis la période médiévale, époque à laquelle l'ensemble des terres disponibles était exploité pour les besoins de l'agriculture et de l'élevage. L'*outfield* est toujours utilisé comme zone de pâturage. Les villages linéaires, l'*infield*, le littoral et le plateau calcaire forment un paysage agricole empreint d'une grande valeur naturelle et culturelle qui s'inscrit dans un processus millénaire.

Le paysage agricole d'Öland est essentiellement évolutif. Il est tour à tour source et conséquence d'une utilisation traditionnelle continue du paysage. La société agricole d'aujourd'hui conserve la mémoire du paysage de l'âge du fer ainsi que des traces abondantes de l'âge du bronze. À Öland, l'histoire agraire de l'homme est par conséquent lisible dans une aire géo-culturelle clairement définie.

*Stora alvaret*, remarquable plateau calcaire, est une lande ouverte, consacrée au pâturage, et un exemple unique d'écosystème de steppe dont l'évolution dépend, entre autres, d'adaptations successives au climat, au gel et à la pâture. Malgré la maigreur de ses ressources, l'Alvar a été transformé en un paysage agricole. La coïncidence de facteurs géologiques, climatiques et culturels très inhabituels a créé ici un environnement riche et varié qui recèle un grand nombre des principaux habitats naturels, propices à la préservation de la diversité biologique. Coexistent sur l'île des espèces - tant végétales qu'animales - endémiques, uniques au monde ou à la limite de leur habitat naturel. La

survie des espèces est à mettre au crédit des hommes qui, depuis des millénaires, maintiennent l'Alvar en espace ouvert. Malgré la constante utilisation de ce milieu par l'homme, aucune espèce allogène ne s'y est installée. Grâce à la présence de l'homme, les écosystèmes sont stables et soumis à une utilisation agricole continue. Le système de la pâture est un facteur de préservation de la diversité biologique. Tout cela confère à *Stora alvaret* une valeur universelle du point de vue de la recherche scientifique et de la conservation. De plus, la lande de l'Alvar, étendue plate et ouverte, est unique au monde avec sa multitude de micro-variations d'habitats, et constitue un paysage extraordinaire et un environnement exceptionnel.

Les terres et les prairies côtières sont utilisées depuis des millénaires pour les foins et la pâture, comme l'indique clairement la faune et la flore. Les terres côtières recèlent plusieurs communautés botaniques originales et offrent un habitat important pour un grand nombre d'espèces d'oiseaux rares et vulnérables.

Les sépultures mégalithiques à couloir datant de l'âge de la pierre, les cairns monumentaux de l'âge du bronze, les forts préhistoriques, les fondations des maisons, les systèmes complexes d'enclos de pierre avec leurs parcelles arables fossiles et les grands sites funéraires de l'âge du fer attestent une préhistoire riche et abondante. L'actuelle communauté agricole plonge ses racines loin dans le passé et parfois jusqu'à l'âge du fer. Le parcellaire actuel, les villages linéaires implantés « selon la loi » et la distinction entre l'*infield* et l'*outfield*, datent du Moyen Âge. Les fermes et les autres constructions sont bâties avec des matériaux trouvés sur l'île. Les maisons dites « Geatish » et les moulins sont autant de repères typiques qui ponctuent le paysage. Les églises, construites au Moyen Âge, ont été agrandies au XIXe siècle pour répondre à la pression démographique et à l'expansion de l'économie agricole. C'est à cette époque que les terres de l'*infield* et de l'*outfield* ont été réparties entre les fermiers, attributions qui demeurent clairement perceptibles aujourd'hui.

Le paysage agricole d'aujourd'hui reflète plusieurs strates chronologiques importantes d'un point de vue historique, qui donnent à l'ensemble une perspective chronologique considérable : 1. l'âge du fer fossile est encore visible dans les pâturages ; 2. le Moyen Âge a instauré la distinction entre l'*infield* et l'*outfield* et créé l'habitat structuré en villages ; 3. les réformes foncières des XVIIIe et XIXe siècles ont abouti à la redistribution des terres et à la construction des murs de pierre destinés à marquer les limites entre les propriétés. Les liens fonctionnels dans le paysage agricole du sud d'Öland sont très originaux, extrêmement bien préservés et d'une grande authenticité.

Le paysage agricole du sud d'Öland possède une tradition culturelle unique, encore perceptible dans l'utilisation des sols, le parcellaire, la toponymie, l'habitat et la diversité biologique.

### Critère iii

Le paysage agricole du sud d'Öland est un exemple éminent de paysage illustrant d'importantes étapes de l'histoire humaine. L'actuel parcellaire, qui date du Moyen Âge, illustre la manière dont les conditions naturelles ont défini les zones arables en des temps très reculés. Les traces abondantes de l'âge du fer livrent un témoignage

exceptionnel d'une culture révolue et d'une utilisation originale du paysage qui n'est visible nulle part ailleurs.

#### Critère iv

#### Catégorie de bien

En termes de catégories de biens culturels telles qu'elles sont définies à l'article premier de la Convention du patrimoine mondial de 1972, le bien proposé est un *site*. C'est aussi un paysage culturel, tel que défini au paragraphe 39 des *Orientations devant guider la mise en œuvre de la convention du patrimoine mondial*.

#### Histoire et description

##### Histoire

Les premiers hommes à s'installer sur l'île d'Öland il y a 8000 ans vivaient de la chasse et de la cueillette. Le site d'Alby en bord de mer, occupé par ces premiers habitants pendant environ deux mille ans, a été fouillé. Les vestiges archéologiques de cette période attestent la domestication des plantes et des espèces animales et révèlent une exploitation importante de l'Alvar. Les tombes mégalithiques à couloir de Resmo, au sommet de Västra Landborgen, indiquent la permanence de l'installation de l'homme en ce lieu durant la période néolithique.

L'évolution s'est poursuivie à l'âge du bronze (1800-500 av. J.-C.), avec la spécialisation des pratiques agricoles. Les progrès technologiques permirent la mise en culture de plus grandes superficies. L'élevage donna lieu à la constitution de grands troupeaux qui paissaient sur l'Alvar.

Durant l'âge du fer (550 av. J.-C. – 1050 apr. J.-C.) l'agriculture connut de plus grands bouleversements, avec la création de terres arables permanentes et l'introduction de l'exploitation laitière. Le paysage, y compris *Stora alvaret*, fit l'objet d'une exploitation intensive en petites parcelles. De l'âge du fer romain et durant la période des Migrations, c'est-à-dire pendant les six premiers siècles de notre ère, subsistent de nombreux vestiges de fermes et de leurs enclos, certaines étant regroupées en villages. La structure clanique de la société de l'âge du bronze, qui reposait sur l'existence de grands cheptels, fit place à des exploitations agricoles individuelles qui produisaient des cultures vivrières et du fourrage. L'économie reposait sur l'élevage et l'exploitation du bétail. Cuirs et peaux et viandes séchées étaient exportés. Les outils de pierre furent remplacés par des outils en métal. Le travail du métal donna lieu à une industrie qui se développa tout au long de l'âge du fer, mais la fabrication de peignes et le polissage de la pierre subsista. La pêche, en particulier la pêche au hareng, prit de l'importance et fut surtout pratiquée à Kyrkhamn, à la pointe sud d'Öland.

De cette époque troublée, où les insulaires durent se protéger, on connaît cinq forts ou plus exactement cinq villages fortifiés. Probablement simples refuges à l'origine, ils devinrent des habitats permanents. Une structure législative fut créée et les questions importantes furent débattues par le *Ting* qui détermina les règles de l'administration de la justice. Une organisation militaire, le *ledning*, fut créée pour la défense contre les ennemis extérieurs.

Au début du Moyen Âge, à partir du XI<sup>e</sup> siècle, l'habitat de l'âge du fer se modifia selon le système médiéval des champs ouverts et des cultures alternées selon les courbes de niveaux. À cette époque se constituèrent les lieux d'habitation qui sont toujours occupés aujourd'hui, commodément implantés sur des terrains élevés et secs, entre l'*infield* et l'*outfield*, et disposés selon un plan linéaire le long d'une rue unique.

La prospérité de l'île, due en grande partie à sa situation sur la grande route commerciale qui traverse le détroit de Kalmar, se manifeste dans les imposantes églises de pierre construites au XII<sup>e</sup> siècle, comme celle de Hulterstad et de Resmo. Elles étaient fortifiées pour soutenir les attaques des maraudeurs. Öland exportait des chevaux, des bœufs, du poisson, de la pierre à chaux et de l'ardoise.

Au XV<sup>e</sup> siècle, Öland était dominée par des fermiers, propriétaires terriens, bien que la couronne, l'aristocratie et les ordres monastiques possédassent également des terres. Gustave Vasa construisit cinq manoirs « modèles » au profit des fermiers locaux, ainsi qu'un centre d'élevage. La pêche était importante et d'un intérêt particulier pour les communautés monastiques : Kyrkhamn, à la pointe sud de l'île, était un centre important de cette activité. En 1569, Jean III s'arrogeât les espaces libres de l'île comme réserve de chasse royale. Les fermiers perdirent leurs droits de vaine pâture et souffrirent beaucoup des déprédations causées par le gibier de la réserve. Ce privilège royal survécut jusqu'en 1801, date à laquelle il fut aboli.

L'île subit aussi les longues guerres entre la Suède et le Danemark à la fin du XVII<sup>e</sup> et au début du XVIII<sup>e</sup> siècle, sans oublier les grandes épidémies qui emportèrent près de la moitié de la population. Les fermes furent désertées et les champs retournèrent en friche. Dans la dernière moitié du XVIII<sup>e</sup> siècle, la première réforme du système foncier (*storskifte*) procéda au regroupement d'un grand nombre de petites parcelles agricoles détenues par les fermiers en propriétés agricoles plus grandes. Une redistribution des terres encore plus radicale (*enskifte*) eut lieu au début du XIX<sup>e</sup> siècle. Chaque fermier reçut des lots constitués de différents types de terres dans les limites de la commune – terres arables, prairies, Alvar et littoral. Simultanément, de nombreuses fermes furent déplacées en dehors des villages linéaires. De grandes étendues de terres furent mises en culture à cette époque.

La forte croissance démographique poussa les hommes à chercher du travail saisonnier sur le continent et en Europe du Nord. Toutefois, ce n'est qu'au moment de la crise agricole des années 1880 que plus d'un quart de la population insulaire émigra en Amérique du Nord. Les villages de l'Alvar furent abandonnés et les activités agricoles, suspendues. Toutefois, les premières années du XX<sup>e</sup> siècle connurent une expansion considérable et une diversification des activités agricoles, comme par exemple les cultures maraîchères et la betterave à sucre, alors que l'industrie laitière prenait son essor.

La Grande Dépression de 1930 força de nombreux paysans à quitter la terre. Après la Seconde Guerre mondiale, l'agriculture connut une rationalisation et une mécanisation intenses. Le nombre de fermes diminua par rachats et fusions. Ce processus se poursuit, accompagné d'un exode rural concomitant.

## Description

La zone proposée pour inscription sur la Liste du patrimoine mondial comprend le tiers sud de l'île d'Öland, couvrant 56 323 ha (dont une partie de la mer Baltique de 6069 ha).

L'île est de formation sédimentaire, la partie supérieure étant constituée de calcaire ordovicien (l'Alvar). Le principal élément topographique est Västra Landborgen, une falaise de 20 à 40 m de haut qui parcourt l'île du côté ouest. Puis il y a une plaine côtière de 3 km de large, la vallée Mörbylånga, qui comporte les sols les plus fertiles d'Öland. À l'est se trouve *Stora Alvaret*, étendue de calcaire d'une superficie de 250 km<sup>2</sup>, dont la moitié est soit exposée soit recouverte d'une fine couche d'humus ; d'autres parties sont couvertes de plage en surplomb ou de petites plaques de sédiment et parfois de tourbières. Östra Landborgen, le long de la côte est, est constitué d'un ensemble de plages surélevées.

Les villages sont presque tous situés le long de Västra Landborgen. Le territoire de chaque commune comprend des terres arables à l'ouest, l'Alvar puis une portion de la côte à l'est.

Un grand nombre de sites archéologiques datant de la période préhistorique se trouvent dans la zone proposée pour inscription. Les sépultures mégalithiques à couloir sur Västra Landborgen témoignent d'une occupation permanente au Néolithique. Sur *Stora Alvaret* il existe un ensemble de cairns funéraires de l'âge du bronze disposés sur un axe nord-sud le long de falaises au centre de l'île. Des fondations de maisons et des cimetières, à cet endroit et ailleurs dans le sud, illustrent la densité d'occupation de l'île à l'âge du fer. *Stora Alvaret* est sillonné par un réseau de chemins creux de 380 km de long; les petits cairns ou les pierres levées qui les jalonnent servaient peut-être à marquer les limites des propriétés.

Les fondations de maisons sont aussi répandues sur les terres et les pâturages côtiers, entourées de restes d'enclos formés de murs de pierre. Les villages existants, qui ont remplacé ceux de l'âge du fer, sont situés sur les deux falaises - Västra et Östra Landborgen - respectivement à l'ouest et à l'est. Treize de ces villages sont presque tous alignés et construits sur des sites imposés par la loi « *laga läge* » : cela signifie que le village est construit sur un plan datant du Moyen Âge, la taille des lots rectangulaires étant proportionnelle à l'attribution de terres arables et de pâturages pour chaque ferme. Les bâtiments sont construits sur la partie surélevée et sèche de la parcelle, les terres les plus basses étant consacrées à la culture. Il existe des exemples bien conservés de ce type de village à Lilla Frö, Södra Sandby, Slagerstad, Södra Kvinneby, Triberga, Hulterstad et Gösslunda.

Les fermes « Geatish » typiques possèdent deux cours, l'une d'habitation (*mangård*) l'autre pour les animaux (*färgård*), séparées par un mur ou une barrière. Peu d'entre elles conservent la disposition d'origine en raison des changements d'utilisation agricole et de la construction de bâtiments annexes. Les maisons sont en bois, protégées par du bardage. Beaucoup de ces maisons ont été considérablement agrandies et embellies, avec l'ajout d'étages supérieurs et une ornementation plus particulièrement autour des portes. Certaines des granges

conservent leurs structures médiévales d'origine, avec leurs toits à poinçon.

La plupart des fermes possédaient leur propre moulin, dont il reste 62 exemples. Le premier moulin que l'on connaisse a été construit pendant la première moitié du XVIe siècle, mais la plus grande part des 1730 moulins répertoriés en 1820 datent de la fin du XVIIIe siècle, au moment de la mise en culture de nouvelles terres.

En plus des grands bâtiments de fermes, chaque village possédait un groupe de maisons plus modestes (*malmbebyggelsen*), occupées par des habitants sans terre. La plupart de ces maisons sont maintenant des maisons de villégiature.

Au centre de chaque village, il y avait une église. Les premières structures étaient en bois puis furent remplacées par des constructions massives en pierre datant des XIIe et XIIIe siècles, flanquées d'une tour, une deuxième tour étant souvent construite à des fins défensives. Les églises de Hulterstad et de Resmo conservent leur apparence d'origine. On les appelle aussi « églises de bât » à cause de leur silhouette. Les nefs de beaucoup de ces églises ont été détruites au début du XIXe siècle pour répondre à la pression démographique. Elles conservaient généralement leurs tours auxquelles on ajoutait une lanterne. Les nefs médiévales à bas-côtés étaient remplacées par une structure à voûte en berceau spacieuse d'où leur nom « d'église halle ».

Les forteresses de la fin de l'âge du fer, ou villages fortifiés - Sandby, Bårby, Triberga, Träby et Eketorp - sont constituées de remparts massifs et de fossés entourant les maisons d'habitation, les ateliers, les maisons communales et autres éléments communaux. Des fouilles ont montré qu'elles ont beaucoup évolué avec le temps, et de simples refuges temporaires elles sont devenues des lieux d'habitation permanents. La forteresse d'Eketorp a été fouillée et restaurée de manière à illustrer son évolution dans le temps.

Le manoir royal (*Kungsgård*) d'Ottenby, à l'extrémité sud de l'île, fondé par Gustave Vasa au XVIe siècle, est toujours propriété de la Couronne. Le bâtiment principal date de 1804 et a servi de modèle à Öland et dans le reste du pays.

L'agriculture demeure l'activité dominante de la zone proposée pour inscription. La superficie cultivée est d'environ 21 000 ha et quelque 37 000 ha sont consacrés au pâturage, dont 26 000 ha sur *Stora Alvaret*. L'élevage est essentiellement orienté vers la production bovine, mais il existe une part importante de production avicole et porcine. Le tourisme est devenu une importante source de revenus, en particulier depuis la construction du pont qui relie Öland à Kalmar sur le continent.

## Gestion et protection

### Statut juridique

Le site proposé pour inscription est protégé par un ensemble de réglementations suédoises, les principales étant la loi sur les monuments culturels, la loi sur la construction et

l'urbanisme et le code de l'environnement. Ces lois offrent une bonne protection aux sites archéologiques, aux monuments, aux bâtiments historiques, et à la faune et à la flore. La totalité de l'île d'Öland est déclarée lieu d'intérêt national conformément au code de l'environnement, et plusieurs zones, qui couvrent une grande partie du bien proposé pour inscription, sont également désignées comme « lieu d'intérêt national pour leurs valeurs culturelles et naturelles ou pour les loisirs de plein air ».

#### *Gestion*

Dans la zone proposée pour inscription, les biens sont répartis entre un grand nombre de propriétaires individuels et d'entreprises, le gouvernement central et la municipalité de Mörbylånga.

Le plan directeur pour Öland, établi conformément aux exigences du chapitre 4 de la loi sur la construction et l'urbanisme, n'a pas force de loi mais il donne une orientation pour les prises de décision et la définition des politiques. Il a été adopté en 1991 et il est actuellement en cours de révision. Il définit les objectifs généraux et envisage des stratégies pour la sauvegarde des valeurs culturelles et naturelles de l'île. Le plan directeur pour la municipalité de Mörbylånga fait partie de ce plan : il est basé sur un travail de cartographie et donne des informations détaillées sur les activités quotidiennes.

Il existe en complément un plan d'urbanisme détaillé pour la municipalité et des réglementations s'appliquant à la zone, conformément au chapitre 5 de la loi. Lesdits plans d'urbanisme et réglementations sont préparés par la municipalité et mis en application par les services municipaux compétents, le travail étant supervisé par les agences centrales de l'environnement et du patrimoine.

Le code de l'environnement comporte des dispositions spécifiques relatives à la protection de tous les éléments environnementaux concernés. Parmi ceux-ci, il y a les réserves naturelles, les réserves culturelles, les paysages, les biotopes, la faune et la flore, le littoral, etc. Il y a une obligation de demande d'autorisation pour toutes les activités susceptibles d'être dommageables à l'environnement naturel et culturel. Les autorisations pour toutes ces activités doivent être obtenues auprès du Conseil d'administration du comté de Kalmar.

Les organes ayant autorité sur la gestion de la zone proposée sont le conseil national du Patrimoine (RAÄ), l'Agence nationale pour la Protection de l'Environnement, le conseil suédois de l'Agriculture, le conseil d'administration du comté et les municipalités.

Il existe une déclaration d'intention passée entre le conseil d'administration du comté de Kalmar, la Fédération des fermiers suédois et la municipalité de Mörbylånga concernant la zone couverte par le bien proposé pour inscription. Il s'agit d'un document qui définit la politique et fixe des objectifs et des orientations pour la coopération future.

## **Conservation et authenticité**

### *Historique de la conservation*

Il est difficile de parler de conservation *consciente* de la zone proposée pour inscription. En tant que « paysage essentiellement évolutif ... qui conserve un rôle social actif dans la société contemporaine étroitement associé au mode de vie traditionnel... » (*Orientations devant guider la mise en œuvre de la Convention du patrimoine mondial*, paragraphe 39), le sud d'Öland a évolué en fonction des impératifs socio-économiques depuis les temps préhistoriques. Chaque étape de l'évolution a laissé une empreinte involontaire sur le paysage.

Toutefois, la Suède est le premier pays à avoir pris conscience de l'importance du patrimoine avec la proclamation royale de 1666 qui jetait les bases de la protection moderne du patrimoine culturel. La Suède connaît aussi un bon niveau de protection de la nature. La faible densité démographique du pays signifie que les paysages ont subi une pression économique et sociale directe moins forte que la plupart des pays développés d'Europe.

Toutes les lois relatives à la protection de la nature et de la culture actuellement en vigueur sont récentes, datant des années 1990, mais la législation dans ce domaine existe depuis au moins un siècle. On peut donc affirmer sans crainte que l'histoire de la conservation de cette zone a un passé long et remarquable.

### *Authenticité*

Des mesures de protection successives ont assuré la survie des caractéristiques culturelles essentielles du sud d'Öland avec un minimum de modifications ou d'ajouts. En tant que paysage vivant, le site possède un degré d'authenticité élevé.

## **Évaluation**

### *Action des organes consultatifs*

Une mission d'expertise conjointe ICOMOS-UICN a visité le sud d'Öland en mai 2000.

### *Caractéristiques*

En termes culturels, le paysage agricole du sud d'Öland est exceptionnel. Il conserve des traces abondantes de sa longue histoire d'occupation par l'homme, depuis les temps préhistoriques. C'est une démonstration remarquable de l'ingéniosité de l'homme dans l'utilisation d'un paysage et d'un environnement qui ne sont pas, à première vue, favorables à toute occupation ou exploitation.

### *Analyse comparative*

Du point de vue du paysage culturel, la preuve d'une occupation continue du sud d'Öland n'est pas exceptionnelle. Son importance repose sur le fait que le plateau calcaire (*Stora alvaret*) est l'un des plus grands d'Europe, et le paysage qui s'en dégage est un exemple parfait d'adaptation aux conditions physiques difficiles et uniques au monde. Il est également remarquable dans la

mesure où le schéma médiéval d'occupation des sols des villages et du système agricole est toujours clairement visible et reste un des rares exemples qui soit parvenu jusqu'à nous en Europe du Nord.

### **Brève description**

La partie sud de l'île d'Öland dans la mer Baltique est dominée par un grand plateau calcaire. Depuis quelque cinq mille ans, les hommes vivent ici et adaptent leur mode de vie aux contraintes physiques de l'île. Le paysage est par conséquent unique et témoigne abondamment de l'occupation humaine depuis la préhistoire jusqu'à nos jours sans discontinuité.

### **Recommandation**

Que ce bien soit inscrit sur la Liste du patrimoine mondial sur la base des *critères iv et v* :

*Critère iv* Le paysage du sud d'Öland tient ses formes contemporaines de sa longue histoire culturelle, s'adaptant aux contraintes physiques de la géologie et de la topographie.

*Critère v* Södra Ölands est un exemple exceptionnel d'établissement humain utilisant de façon optimale les types de paysages divers sur une seule île.

ICOMOS et UICN, septembre 2000