

Biosphere reserve
Kristianstads Vattenrike®



ACTIVITIES 2005



Kristianstads Vattenrike Biosphere Reserve



PHOTO: PATRIK OLOFSSON/NI

There are biosphere reserves all over the world. These areas, officially recognised by the UN agency Unesco, demonstrate how to tackle the practical challenges of combining nature conservation with development.

Kristianstads Vattenrike Biosphere Reserve, established in 2005, includes the greater part of the municipality of Kristianstad, from the forests to Hanöbukten Bay with the rich wetlands of the River Helge å and the town of Kristianstad at its heart.

Extent: Greater part of the Municipality of Kristianstad.

Area: 104,375 ha. (Land and lakes, 90,515 ha; marine area, 13,860 ha.)

(Total land area of municipality: 134,620 ha.)

Population: approx. 70,000, incl. 29,000 in the Kristianstad urban region.

(Total population of municipality: 76,000.)

Species worthy of preservation: There are some 20 globally red-listed species, including corncrake (*Crex crex*) and great raft spider (*Dolomedes plantarius*), and some 60 EU listed species, including thick-shelled river mussel (*Unio crassus*) and bar-tailed godwit (*Limosa limosa*).

In all, there are around 700 nationally red-listed species of flora and fauna. This is high compared to other areas of Sweden.

Around 30% of the red-listed species in the province of Skåne occur in the biosphere reserve.

The wetlands are home to 120–130 regularly breeding species of bird. In all, some 260 species have been recorded.

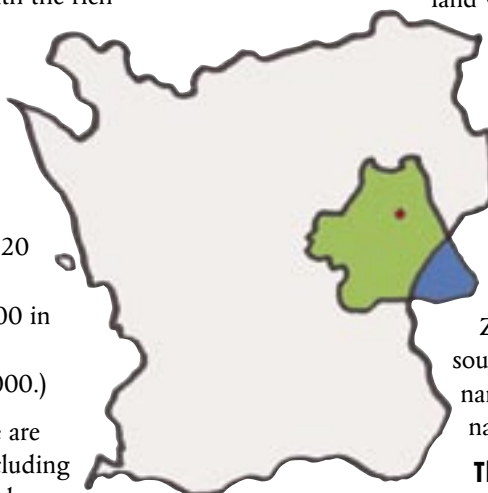
At least 38 different species of fish have been caught in the inland waters: 32, including European catfish (*Silurus glanis*) and loach (*Barbatula barbatula*), spawn in fresh water.

Development projects: There are numerous local projects, such as biogas for municipal buses, wetlands ecotourism and the development of products from the wet grasslands.

Zoning: The area's status as a biosphere reserve has not resulted in any new rules or directives.

Zoning is a tool for prioritising and creating resources for working together with local residents, financial backers, etc. to avert threats and develop the natural values of the core areas and buffer zones.

Theme areas: Ten theme areas with high natural values have been identified. Work will gradually extend to all ten themes, but to date the main focus for conservation, development and support has been on the wetlands. Projects on the sandy grasslands formerly managed under a rotational system of cultivation and fallow have also commenced.



Cover photo: Marie Grönvold

Kristianstads Vattenrike Biosphere Reserve was officially inaugurated on 17 September 2005. Sven-Erik Magnusson, who coordinates work in the biosphere reserve, raises the reserve's own flag as Åke Egevad plays a fanfare on a replica of a watchman's horn unearthed during the excavation of the ruins of Lillö Castle.

The year in review – 2005

Work with Kristianstads Vattenrike is a dynamic process. No two years are ever the same, but 2005 was special in at least two important ways.

Firstly, the UN agency Unesco approved Kristianstads Vattenrike as an international biosphere reserve. The inauguration at Lillö in September marked the culmination of years of work stretching back to 1989.

That was when the municipal council resolved to work with national and international bodies and NGOs to preserve, restore and utilise the natural water resources and their surrounding environments in a sustainable way.

Secondly, 2005 saw us expand our work in the biosphere reserve. For many years work has revolved around the wetlands; now we also began to focus on the extensively cultivated sandy grasslands. These include patches of xeric sand calcareous grasslands and are very valuable from a national and international perspective.

Involvement from all sectors

Many people have played a part in helping Kristianstads Vattenrike to achieve biosphere reserve status. This would not have been possible without such passionate commitment from landowners, farmers, companies, associations, organisations and the local council.

For many years these stakeholders have worked in tune with the spirit of the biosphere reserve without being aware of the concept as such.

International concept

But why not enjoy the benefits that an international concept has to offer? What was needed was to make this work visible, so that people outside the local community also understood how much was being done to safeguard these unique natural assets and local knowledge about them.

Biosphere reserve status became a sort of certification for our efforts in this direction. Now we have written confirmation that all of us who espouse these aims are actively involved in a biosphere reserve and working in accordance with the principles this demands. Properly used, this recognition often generates interest in and resources for our various activities. Several companies, institutions and individual initiatives have already received a boost thanks to the biosphere reserve's networks.

Biosphere reserve

During the year activities have been conducted in all three functions (conservation, sustainable development and logistic support) that Unesco-MAB lays down as conditions for biosphere reserves worldwide. In Kristianstad there are many different models for how to work with these activities.

What follows is just a handful of examples of the work of many different stakeholders in 2005.

The projects with cranes, geese, salmon and the sandy grasslands include components from all three functions. Other projects focus on just one or two: ecotourism, for example, is crucial for spreading information (support), but also a motor behind the development of ecotourism businesses.

Focus on support

The year's activities with many of the biosphere reserve's plant and animal species focused on conservation and environmental monitoring (support). Several others had links to research (support) and education (support) under the auspices of the university, high schools and the "Nature School".

I hope many people have now realised that a biosphere reserve is about man and nature in harmony. Biosphere work rarely seeks solely to protect nature from human encroachment. It protects natural values to safeguard mankind's existence and to promote wellbeing.

In many instances, the problem is not that we exploit nature for our own benefit, but the way in which we do so.



Sven-Erik Magnusson

Sven-Erik Magnusson
Coordinator/Ecomuseum director
Kristianstads Vattenrike Biosphere Reserve

Theme areas in the biosphere reserve

Kristianstads Vattenrike Biosphere Reserve measures roughly 35x35 kilometres and contains many types of nature with high natural values. The application to Unesco describes ten of these areas as "theme areas", where work is specially focused on the three biosphere reserve functions of conservation, development and support.

Theme areas make clear where the natural values are in the biosphere reserve. Within the dotted red line marking the limits of the biosphere reserve in this bird's eye view (right), you can see the forested ridges and Kristianstadsslätten Plain, the rich wetlands and the long coastline of Hanöbukten Bay, together with the underlying bedrock.

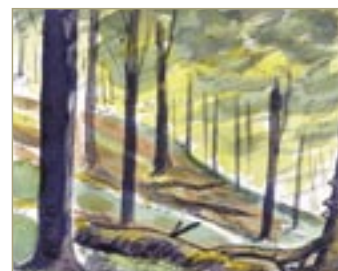
Valuable sections of countryside

The ten theme areas shown in the accompanying illustrations include sections of countryside with high natural values: from the forested slopes of Linderödsåsen Ridge, via the streams and rivers to the rich wetlands of the plain and on towards the sandy grasslands, the coastal landscape with extensive dunes and Hanöbukten Bay. Nature on the fringes of built-up areas forms one of the theme areas; ground water another.

Scattered among the arable land from the forested areas north and west and out towards the sea are valuable tree environments with ancient trees and avenues. Lake Råbelövssjön and Balsberget Hill with their distinctive topography and special geology form a theme area of their own.

So far, the main focus has been on the wetlands, but during 2005 work with the sandy grasslands was intensified, as you can read over the page.

Gradually the scope will be extended to include all theme areas.



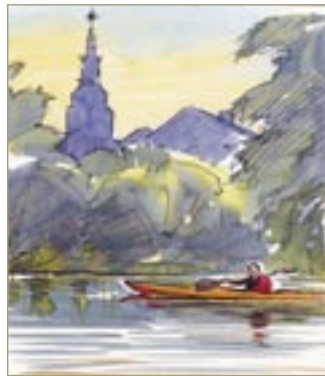
Rich woods and forests on the slopes of Linderödsåsen Ridge



From the water tower in Kristianstad two theme areas with high natural values are visible: "The rich wetlands along the River Helge å" and "Town meets water". Kristianstad has huge potential for offering natural experiences to residents and visitors alike. Maintaining the natural values, however, places demands on sustainable planning and development.



The rich wetlands along the River Helge å



Town meets water



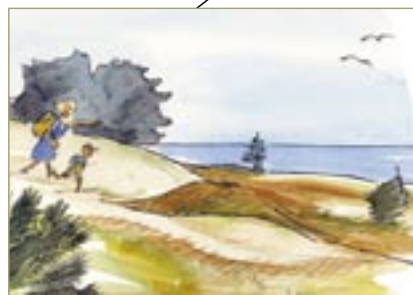
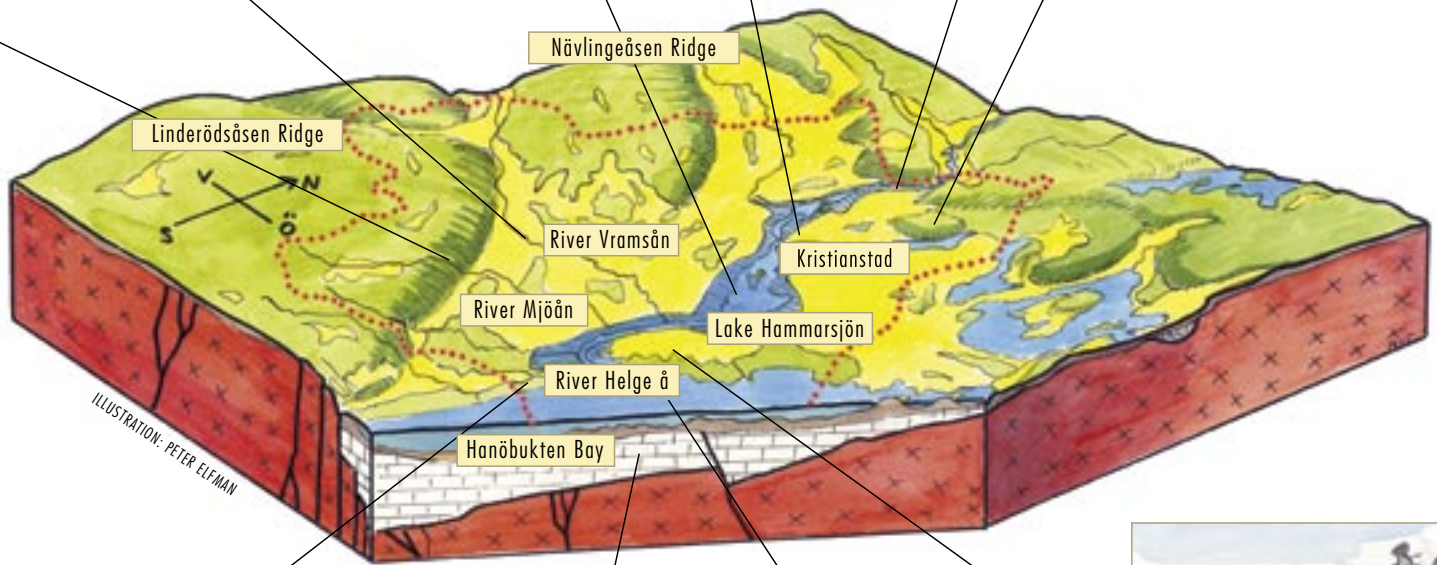
Ancient trees and wooded habitats in cultivated areas



Tributaries of the River Helge å originating on Linderödsåsen Ridge



Balsberget Hill and Lake Råbelövssjön



The coastal landscape with extensive sand dunes



Groundwater



Sandy grasslands formerly managed under a rotational system of cultivation and fallow



The coastal waters of Hanöbukten Bay

Focus on the sandy grassl

The sandy grasslands in and around Åhus create a special type of landscape with its own distinctive flora and fauna. In summer, to the delight of residents and visitors, the open countryside is flecked with flowers and large numbers of rare insects thrive on the sandy soils. There is also potential for practical initiatives that preserve and reinforce the area's natural values. For example, the sandy grasslands are important for outdoor activities and recreation, which helps promote good health and adds a social dimension to nature conservation.

But there are also serious threats: the demand for new land for homes and businesses, intensive farming and the overgrowth of vegetation.

In view of the area's high natural and cultural values and this clash of interests, the sandy grasslands have been prioritised as a biosphere theme area.

New outdoor museum

"We must conserve and develop the important values in this type of landscape," says Carina Wettemark, project leader and ecologist at the Biosphere Office. "The top priority may well be to spread information to make landowners, farmers, residents, tourists, civil servants and politicians aware of the high natural and cultural values."

As an initial step towards this, plans are under way to establish an outdoor museum at Sännarna by the old military bunker west of the golf course in Åhus.

"We will also establish a demonstration plot to show the special way these areas were used prior to the mid 1900s," explains Carina.

Rotational system of cultivation and fallow

The poor sandy soils are a very old feature of the cultural landscape with close historical links to the wet grasslands. In days gone by, hay from the wet grasslands was used as winter fodder for the animals, whose manure



Sands of Åhus

subsequently fertilised the surrounding fields. Some of the land was so poor that it could be cultivated only once every five to twenty years. In the intervening period it lay fallow and was used as pasture for the animals while it regained nutrients.

Together with a dry, sunny climate this rotational system of cultivation and fallow provided the basis for a special type of countryside where rare plants, birds and insects could establish a foothold.

This landscape has been preserved at Ripa sands, for example, and at Rinkabyfältet and Lyngsjö, even if it is now mostly used for grazing. Xeric sand calcareous grasslands are a special type of sandy grassland. In addition to a dry, sunny climate they also require calcium-rich soils that must be repeatedly disturbed and displaced to expose fresh sand.

Demonstration plot with rye

A demonstration plot will be established in the area adjacent to the Sännarna outdoor museum. The first trials were carried out in autumn 2005 when an old-fashioned, hardy variety of rye was sown. This year the rye will be harvested and the land will then lie fallow for a year before being grazed until 2012. Six areas will be laid out, each illustrating a different phase of this cycle.

“Another important aspect of our work with the sandy grasslands will be to make an inventory of plants, insects and fungi to identify where the high natural values are to be found,” concludes Carina Wettemark.



Inauguration in September



It was a big day at Lillö when the biosphere reserve was officially inaugurated on 17 September. Visitors gathered in the glorious late summer sunshine to see Sweden's Minister of the Environment, Lena Sommestad, declare the reserve open. After a welcome address from Heléne Fritzon, Chair of the Municipal Executive Committee, Unesco's Jane Robertson presented the diploma confirming Kristianstads Vattenrike's status as one of almost 500 biosphere reserves worldwide.



A medieval atmosphere in the courtyard was created by the Mare Balticum ensemble, Nature School pupils in medieval dress, and jesters and drama students from the C4 School. In a special pavilion a calligrapher penned souvenir cards for visitors.

Nature and culture on the menu

in Lillö



Many visitors took the opportunity to enjoy a water safari, a riverboat ride, or to go kayaking or fishing.

PHOTO: MARIE GRÖNVOLD



PHOTO: BIOSPHERE OFFICE

The day's events began when former museum curator Thorsten Andersson officially opened a new exhibition, "Life at Lillö". The exhibits in the north corner tower – copies of archaeological finds, painted figures and texts – give visitors a glimpse of everyday life at Lillö in bygone times.

A festive inauguration day in September heralded the start of work in Kristianstads Vattenrike Biosphere Reserve at the same time as it marked the end of an intensive period as a biosphere candidate.

The nomination form was submitted to the Swedish Ministry of the Environment on 17 January for consideration by a number of government ministries.

During the spring we were obliged to provide information to various authorities, such as the Swedish National Road Administration, to whom we had not previously had the opportunity to present our plans.

In March the Swedish government officially approved the application and commissioned the Swedish Unesco Council to submit the nomination form to Unesco in Paris. On 29 June we received the good news from Unesco that Kristianstads Vattenrike had, indeed, been approved as a biosphere reserve.

January–April 2005

Eagles

The annual eagle census was carried out by the local ornithological society in mild weather on 8 January. By the end of the day more than 50 eagles had been counted at some 30 locations.

A few weeks later more than 100 people visited Tosteberga on the Day of the Eagle to see the magnificent birds for themselves at close quarters.



PHOTO: PATRIK OLOFSSON/VI

Nature's Best in the wetlands

On 26 January the first two nature tours in Skåne received "Nature's Best" approval, Sweden's national stamp of quality for responsible ecotourism. With water safaris run by Landskapet JO (see photo) and riverboat trips through the wetlands pioneering the way, the biosphere reserve is well positioned to develop into an ecotourism destination.



PHOTO: BIOSPHERE OFFICE



PHOTO: PATRIK OLOFSSON/VI

Cranes

The cranes came late last spring when strong east winds forced many to choose a more westerly migration route than usual. The highest number recorded was 2,250 resting overnight on 1 April.

Visitors flocked to the Pulken outdoor museum to see the birds for themselves. The feeding at Yngsjö went very well for 14 days. Four colour-marked cranes were seen during the spring, one of them from Germany.



PHOTO: BIOSPHERE OFFICE

Millennium study and BBC

In March the UN-supported Millennium Ecosystem Assessment issued a report that featured Kristianstads Vattenrike as one of two Swedish studies.

In the report, which focuses on the importance to mankind of functioning ecosystems, the rich wetlands of Kristianstad Vattenrike are described as a model area for responsible ecosystem management. The BBC sent a film team to interview farmers and researchers about work in the biosphere reserve.

May–August 2005

Fen ragwort and slender naiad

In summer an inventory was made of slender naiad (*Najas flexilis*) in the biosphere reserve. This unprepossessing little aquatic plant, discovered in Lake Hammarsjön in 1996, is endangered in Sweden and the inventory formed part of a conservation programme from the Swedish Environmental Protection Agency.

Around 10 small specimens were found at one spot in the lake. Proposed measures for the plant's protection include further studies of the distribution of the species.

The annual inventory of fen ragwort (*Senecio paludosus*) was conducted in early August. Since the protracted high-water levels in 2002 this plant has not bloomed as well as usual. The 2005 inventory suggests, however, that the fen ragwort's habitats have now recovered somewhat.



PHOTO: BIOSPHERE OFFICE



PHOTO: PATRIK OLOFSSON/N

Salmon fry released

Salmon disappeared from our lakes and rivers in the mid 1900s. Now, however, the good water quality means the salmon are back.

In collaboration with the River Helge å and Köpinge fishery conservation areas, the County Administrative Board in Skåne and others, 40,000 salmon fry were released in the River Vramsån in mid-May. The aim is to reintroduce a self-reproducing salmon population into the area.



PHOTO: BIOSPHERE OFFICE

Outdoor classrooms for Nature School

In summer the Nature School received a grant from the Swedish EPA's fund for nature investment programmes (NIP).

As a result the school commenced a three-year project to develop five outdoor teaching facilities in the biosphere reserve.

The River Vramsån (see photo) is one of the sites for which teaching materials will be produced to make it easier for teachers and pupils to use the area as an outdoor classroom.



PHOTO: BIOSPHERE OFFICE

Urban landscapes

In June around 20 researchers from all over the world visited Kristianstads Vattenrike as part of the Gothenburg-based conference "Life in the Urban Landscape".

They wanted to see for themselves how we combine conservation and development in an urban biosphere reserve.

September–December 2005

Inauguration of wet grasslands meat

The inauguration of the biosphere reserve in September (pages 4–5) also marked the launch of meat marked with the Strandängskött brand.

On the initiative of four local farmers and livestock producers, meat from animals that graze the local wet grasslands is now sold in one of Kristianstad's supermarkets.

This is a good example – in more ways than one – of the challenge of combining conservation and development in the biosphere reserve.



PHOTO: BIOSPHERE OFFICE



PHOTO: BIOSPHERE OFFICE



PHOTO: BIOSPHERE OFFICE

Machines show their muscles

In October the land at Sännarna was ploughed and rye sown in a first step towards establishing a demonstration plot (see pages 6–7). Later the same month we showed that the biosphere reserve can work as a model area for something as concrete as a practical demonstration of agricultural machinery.

The County Administrative Board had invited interested parties to the Näsby fält nature reserve to witness the work of modern stump grinders, brush cutters and other nature conservation equipment.

Kristianstads Vattenrike – the book

The first book about Kristianstads Vattenrike was published just in time to tempt Christmas shoppers. It is a joint project involving Patrik Olofsson (the main author and photographer), the Biosphere Office and the Society for Nature Conservation in Skåne, which published the work as its yearbook.

The book was extremely well received locally and had sold more than 2,000 copies by the end of the year.



PHOTO: BIOSPHERE OFFICE

Contact us at the Biosphere Office

Sven-Erik Magnusson, Co-ordinator: tel. +46 (0)44–13 64 80,, sven-erik.magnusson@kristianstad.se

Karin Magntorn, Information Secretary: tel. +46 (0)44–13 64 83,, karin.magntorn@kristianstad.se

Read more about Kristianstads Vattenrike – nature, culture, visitors' sites and Biosphere Reserve: www.vattenriket.kristianstad.se

Address: Biosphere Office, Municipality of Kristianstad, SE-291 80 Kristianstad, Sweden