

Kristianstads Vattenrike Biosphere Reserve Activities 2022



Vattenriket® 

Kristianstads Vattenrike is a Unesco-designated biosphere reserve that serves as a model area for sustainable development. There are some 700 biosphere reserves worldwide, seven of which are in Sweden.

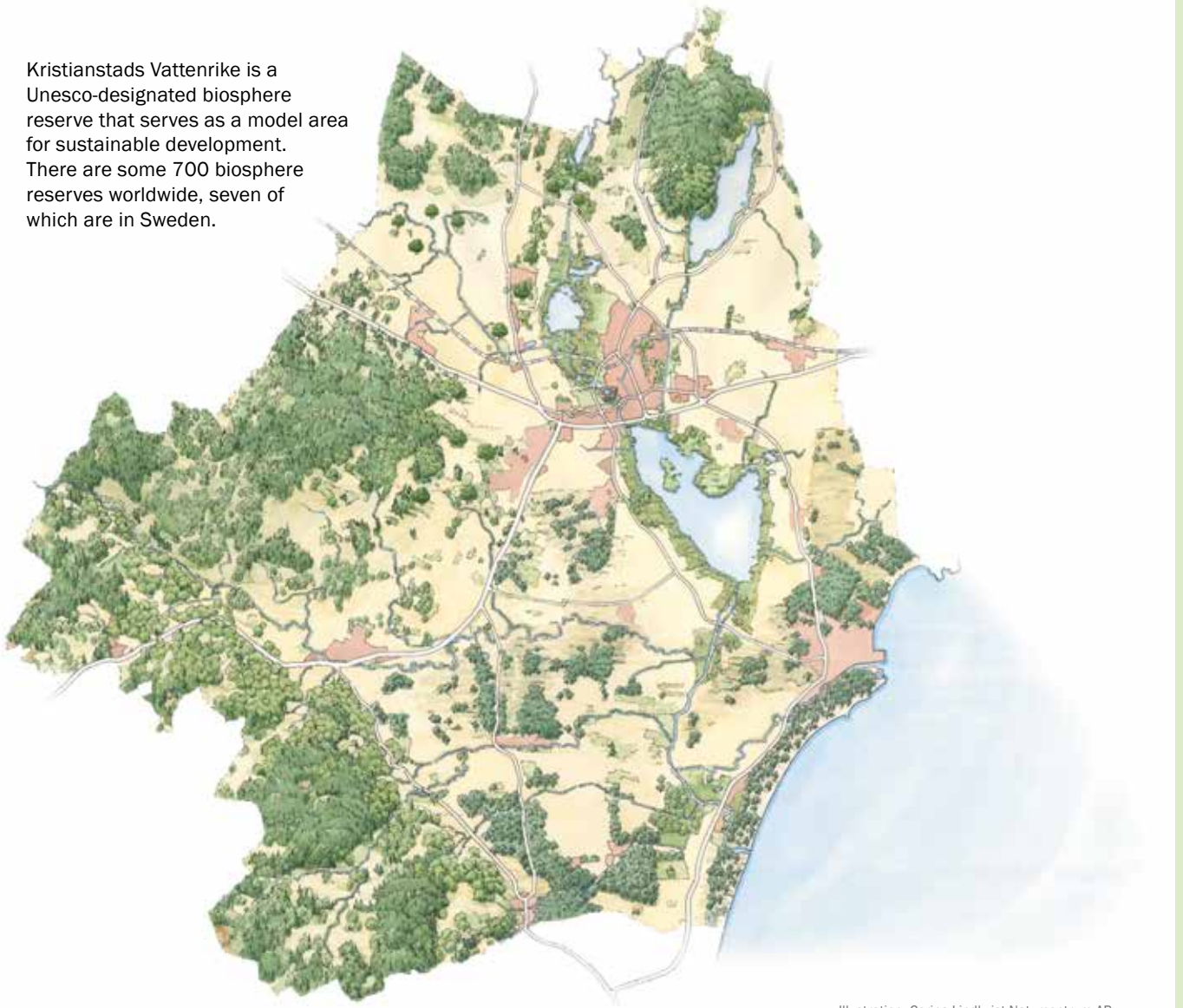


Illustration: Carina Lindkvist Naturcentrum AB

Kristianstads Vattenrike Biosphere Reserve

Kristianstads Vattenrike Biosphere Reserve (Vattenriket) occupies most of the municipality of Kristianstad. This rich cultural landscape is endowed with almost every type of natural habitat to be found in Sweden.

The majestic River Helge å is a central feature. Fed by streams from the ridges and plains, it flows into Lakes Araslövssjön and Hammarsjön before reaching the sea in Hanöbukten Bay. The river is fringed by wetlands and seasonally flooded grasslands, but there are also leafy forests and dry sandy arable lands within the reserve.

Such variety creates numerous natural habitats and the species-rich reserve, less than two tenths of one percent of the area of Sweden, is a refuge for some 20% of the nation's red-listed species.

Kristianstad Municipality is committed to making the biosphere reserve a model area for sustainable development.

Producing and sharing knowledge about the landscape and nature is crucial for an ecologically, economically and socially sustainable society, so we make inventories, publish reports, work with researchers, host conferences and welcome some 100,000 visitors a year to the naturum visitor centre.

We collaborate with local associations, companies and landowners to use and conserve natural values. We create wetlands and restore sandy grasslands. Species diversity and efficient ecosystems help us to cope better with challenges such as

climate change.

Enabling people to experience nature inspires them to help conserve it. The biosphere reserve has some 20 visitor sites with observation towers, marked trails and outdoor museums. The jewel in our crown is the naturum visitor centre with exhibitions, meeting rooms, a restaurant and a wide programme of activities. Here we explain how the biosphere reserve works and encourage visitors to explore the area for themselves.

Results have been positive. At the Pulken visitor site migrating cranes, visitors and farmers co-exist in harmony. Cat-fish have been successfully reintroduced into the river and otters fish close to the naturum. Thanks to a new-found respect for natural values, the wetlands are no longer seen as a problem, but as a valuable resource for Kristianstad.

2022 – The year in review

2022 was the year when the pandemic loosened its stranglehold on us, and turned into something that we probably have to learn to live with. Since the pandemic, life has been dominated by the war in Ukraine and gloomy statistics on the state of biodiversity. There are many dark and heavy clouds in the sky, but that is why it feels particularly important and positive to highlight all the positive things that have happened in the Kristianstads Vattenrike Biosphere Reserve during the year.

The activities have been inspired by the sea as a theme, with everything from an exhibition at the naturum and a series of well-attended programme activities to fishing at Snickarhaken and bioblitz – an intense biological survey for species on the Biodiversity Day. The Baltic Sea Compass is a new educational tool focused on marine ecosystem services, and we have organised breakfast meetings together with the local business community, taken measures to improve the stock of pike and perch, among many things.

With WWF as lead partner, we are jointly running Återskapa Östersjöns livskraft, a project aimed at restoring the health of the Baltic Sea, together with the High Coast and the Stockholm archipelago. It is inspiring and rewarding to work together with other regions! Their coasts and

drainage basins are very different from ours, but together we are taking a series of actions and raising awareness that will make a difference for the Baltic Sea!

Research shows that spending time in nature improves our well-being and that a rich natural environment contributes to the attractiveness of the local area and a good quality of life for those who live and work in it. During the pandemic, it became apparent that even more people have discovered the value of spending time in nature. In order to facilitate outdoor activities, Kristianstad and Vattenriket was added to the app called Naturkartan. You can plan your excursion here with ease. Perhaps you want to walk the SL6 Vattenriket subtrail of Skåneleden, which now stretches all the way up to Lerjevallen, or maybe you prefer to jump like a frog at the nature playground Grodleken at Ekenabben, which was inaugurated this year.

In August, the Södra Äspet Nature Reserve was inaugurated, an important area for outdoor life and with high natural values linked to the pine-covered dunes. Eight areas have been added to the municipality's nature conservation fund, precisely because of their high recreational and natural values. The year ended on a high note when Vattenriket was nominated for the

Nordic Council Environment Prize. The focus in 2022 was on nature-based solutions, and Vattenriket was nominated as Sweden's representative for the prize among five other nominated countries. The winner of the award was the municipality of Mariehamn in Åland, but what an honour to be nominated! However, something that made it all the way was was naturum receiving the Star Wetland Center Award as one of the 23 best wetland centres in the world!

I look forward to 2023 with great optimism. See you in Vattenriket!



Carina Wettemark

Carina Wettemark
Coordinator, Kristianstads Vattenrike Biosphere Reserve Manager, Department for Biosphere Activities, Municipal Executive Office, Kristianstad Municipality

2022

113
school groups with
2520 children
visiting

143
species found during
bioblitz in the sea

10 200
cranes at Pulken
on a single occasion

350
analysed water
samples from
seven wetlands

1
new nature reserve

8,000
new metres of the
Skåneleden trail

30
new ambassadors

1.70
metres above
sea level was the
highest water level
of the year

42
bat houses
installed

100,000
rides with Opteryx
since naturum
opened

50.6
additional hectares
of land in the
municipal nature
conservation fund



Photo: Johan Hammar.

The Baltic Sea Compass makes marine ecosystem services easier to understand.



Photo: Johan Hammar.

Several school classes had the opportunity to discover the aquatic life beneath the surface with the naturum Vattenriket.



An aquatic world came to life in the auditorium of the naturum visitor centre with the help of students from Nosaby School.

Sweet and Salty in Vattenriket



Bioblitz, breakfasts with the local business community and exhibitions. These are some of the ingredients of this year's main marine theme. An effort that aims to restore the vitality of the Baltic Sea while also spreading awareness and engagement.



The sea concerns us all, not least those of us who live and work along the Baltic Sea coast. In 2022, the sea theme dominated the activities of Vattenriket in everything from practical measures to activities in the naturum programme.

With its brackish water, the Baltic Sea is a vulnerable sea. It is not as species-rich as the saltier waters along the west coast and the species that live here do not grow as large. Although much has improved, eutrophication is still a problem, as is increasingly browner water.

In 2021, Kristianstads Vattenrike Biosphere Reserve became part of the WWF project Återskapa Östersjöns Livskraft (Restoring the health of the Baltic Sea), in which WWF, Vattenriket, the Stockholm Archipelago and the High Coast work together for a healthier marine environment. The project has a budget of SEK 28 million for inventories, measures, monitoring, educative efforts, information and engagement.

In 2022, we launched a series of actions. We laid out piles of brushwood and cleared paths through the reed beds at Gropahålet to benefit perch and pike in the River Helge å. Eelgrass was planted near Snickarhaken beach to create new nurseries for fish in Hanöbukten Bay.

The bioblitz generated knowledge and commitment

The marine theme targeted a wide range of audiences, from school groups to the business community. In the spring, naturum's nature educators welcomed school classes to explore and discover life below the surface.

On the Biodiversity Day, on May 22, we organised a bioblitz at Snickarhaken. A bioblitz is an intense biological survey for species in a specific area for a limited time. Experts and volunteers worked together to create engagement around the aquatic life and gather new knowledge.

The waterfront was buzzing with activity all day as families and scouts put on waders and headed out with smaller nets. Fyke nets and sweep seines caught the bigger fish. Divers explored the water further out. Together we found 143 species.

The Baltic Sea was made visible to anyone visiting Åhus during the summer. In the harbour, we displayed fifteen stunning pictures depicting the aquatic life in the Baltic Sea, captured by nature photographer Johan Hammar. His exhibition Sweet and Salt highlighted the unique habitats from north to south.

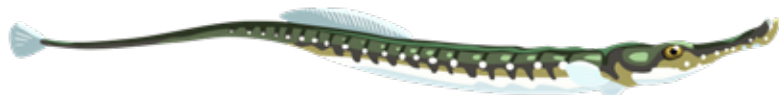
Below the surface

In June, the sea moved into the auditorium of naturum with a new exhibition, puzzle cubes and a flatfish made of fabric. This summer's biosphere camp focused on the sea, and many children participated in netting fish in the naturum programme. During the autumn break, Nosaby School's art and design classes transformed the auditorium into an exciting underwater world made of papier mâché.

Ecosystem services can be difficult to understand, but important to be aware of. Naturum Vattenriket developed a new educational tool to help students discover the marine life and understand marine ecosystem services.

There are many stakeholders who depend on a healthy sea. On World Ocean Day, the 8th of June, the Biosphere Office invited people to a sea-themed business breakfast. A sustainable business community and a healthy sea were in focus when Tina Robertsson and Nan Kjellberg from Absolut Company and Fredrik Åsare from Åhus Hamn gave presentations.

Coordinator Carina Wettemark talked about the work of the Biosphere Office in terms of actions and commitment to the Baltic Sea. Municipal ecologist Ulrika Hedlund reported on the state of the sea and Lisen Schulz, researcher at the Stockholm Resilience Centre, gave advice on how the business community can work towards a sustainable sea.



Bladderwrack grows around the stones of Snickarhaken. The seaweed fronds are important for amphipods, shrimp and fish. During the bioblitz in the sea, a lot of people assisted in finding and netting as many species as possible.



Wetlands are important for birds and dragonflies



Wetlands purify water, regulate flows and are habitats for animals and plants. Vattenriket has contributed to more than 150 hectares of wetlands near streams flowing into River Helge.

Per Torstensson, limnologist at the Biosphere Office, has studied some 60 wetlands that have been created under the auspices of the Biosphere Office. In 2022, he visited landowners with advice on how to make the wetlands function even better.

Per has examined outlets, embankments, the potential occurrence of fish, colour, management, inflowing water and how well the wetland blends into the landscape. Agnes Ekströmer Kemna in Årröd is one of the landowners who was given advice. With its flat slopes, the

Kemnagården wetland looks like it was created by the Ice Age. In fact, it was established in the autumn of 2019.

Today the wetland is grazed by about 20 cows. There are insects and grass of just the right height to nest in, and a variety of birds have found their way here: the oystercatcher, the Eurasian curlew and the northern lapwing.

It was for the sake of birds and biodiversity that Agnes created her wetland. As a Krav (ecological) farmer, the wetland became another step in protecting nature.

Her cows are doing a great job. In many wetlands, dense vegetation of soft rush is common, but here it is kept short. Per's management advice is to reduce the water

in the water level control well to bring the level of the wetland down, allowing the cows to venture further out to graze.

Last year, Hans Cronert, a biologist and former nature conservation coordinator in Vattenriket, studied dragonflies and birds in seven artificial wetlands along River Helge, from the plains in the south to the woodlands in the north.

The wetlands of the plain were the most species-rich in terms of birds, with up to 31 breeding and resting species. The most fascinating of these was the garganey, one of our smallest dabbling ducks.

The number of dragonfly species was between 13 and 16 per wetland. There were as many in the woodlands as on the plains, but the species differed. The blue emperor dragonfly was found in several locations. This species is Skåne's newly designated province dragonfly.



Per Torstensson and Agnes Ekströmer in Årröd.

New nature reserve and more protected land



Among the tree-covered sand dunes and winding paths of Södra Äspet, high natural values go hand in hand with an active outdoor life. In August, the nature reserve, covering an area the size of 126 football pitches, was inaugurated. The majority of the land consists of pine forest on old sand dunes.

In the sandy natural environments around Åhus and along the coast, the natural values are entirely dependent on the availability of exposed, warm sand. Here, plant seeds can germinate and insects can dig tunnels and lay eggs. Many birds find their food in these insect-rich environments.

A few hundred years ago, people fished and gathered seaweed for the fields, farmed, kept grazing animals and used

intentional burning to improve grazing or create arable land. Movement and activity kept the landscape open and the sand exposed.

For a long time it was believed that dune landscapes need to be protected from disruption and stirring. Today we know how important it is that people walk, bike and ride on it. The new nature reserve Södra Äspet welcomes visitors to assist in stirring the sand.

A LONA grant from the Swedish Environmental Protection Agency via the County Administrative Board of Skåne laid the foundation for the work to establish the Södra Äspet nature reserve. The area is managed by the Technical Administration through the nature conservation coordinator Pyret Ovesson.

Eight new areas for nature conservation and recreation

During the year, the municipal Nature conservation fund added another eight new areas. These areas will be managed to

preserve and improve natural and recreational values.

The municipality of Kristianstad has a unique way of securing valuable land for nature conservation and recreation. The nature conservation fund was established 22 years ago. At that time, 1500 ha of municipally owned land was transferred from the land reserve to the Nature Conservation Fund. The fund lands are managed by the municipality's nature conservation managers.

The Biosphere Office initiated a review. Eight new areas were approved during the year. Natural values, geographical spread, variety and recreational opportunities were some of the guiding factors. The new areas are located in Everöd, Färlöv, Horna, Mansdala, Oppmanna, Tollarp, Östra Sönnarslöv and LerjevalLEN.

When Örjan Fritz inventoried Södra Äspet, he found several species of antlions.



Municipal commissioner Pierre Månsson and Biosphere Office ecologist Dan Gerell inaugurated the Södra Äspet nature reserve.

International recognition for Vattenriket and naturum

Kristianstads Vattenrike Biosphere Reserve was nominated for the Nordic Council Environment Prize. At the same time, naturum Vattenriket received the Star Wetland Center Award.

The focus of the Nordic Council Environment Prize 2022 was nature-based solutions. These are solutions that improve the environment and biodiversity while adding social, cultural and economic value.

The Nordic Council chose Vattenriket as one of six nominated organisations. They highlighted the reserve's work in using wetland ecosystem services in mitigating flooding, drought and eutrophication, as well as raising awareness of nature-based solutions.

Vattenriket was in great company with projects such as the planting of eelgrass in Denmark and the restoration of drained wetlands in Iceland. Biosphere Coordinator Carina Wettemark was invited to the award ceremony in Helsinki. There, she presented the work done by Vattenriket at the Finnish Parliament and was present when the environment prize was awarded to Mariehamn in Åland.

Naturum Vattenriket received a prestigious award

the Star Wetland Center Award as one of the world's 23 greatest wetland visitor centers. It is a new award to showcase best practices in ecotourism, communication and education concerning wetlands and water.

The award is co-ordinated by Wetland Link International (WLI), a network made up of staff and volunteers from 300 wetland centres around the world. Chris Rostron, director of WLI, highlighted the architecture, location, accessibility, website as well as refuge and ambassador programmes of naturum.

The nomination and award demonstrates that Vattenriket's efforts in raising awareness of wetlands and changing attitudes from seeing them as a problem to seeing them as a valuable resource are as important as they are appreciated.



Vattenriket was Sweden's candidate for the 2022 Nordic Council Environment Prize!



Carina Wettemark addressed the Finnish Parliament.





The naturum meeting in Abisko brought together naturum centres from all over Sweden.



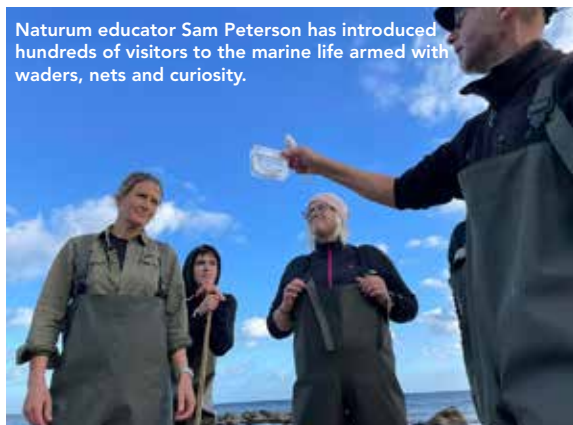
Biosphere Office ecologist Dan Gerell talked about the sandy areas of Vattenriket.



The coordinators from all biosphere reserves in Sweden experienced Vattenriket from the water.



The UNESCO School Network met in the Nordhordland Biosphere Reserve in Norway.



Naturum educator Sam Peterson has introduced hundreds of visitors to the marine life armed with waders, nets and curiosity.



The Baltic Sea Compass is an educational tool developed by Naturum Vattenriket's educators. It aroused great interest among visiting groups during the year.

Sharing knowledge in various networks

When the pandemic restrictions were lifted, it became possible again to attend network meetings and welcome visitors. A long series of visits and international collaborations followed.

Coordinator meeting. For two days, coordinators from the country's seven biosphere reserves, the nominee and the committee for the Swedish Biosphere Programme gathered in Vattenriket. Workshop and briefings were interspersed with a trip along the River Helge å past beach meadows and wetlands to species-rich sandy soils and the Äspet visitor site. Along the way, the staff talked about the efforts to conserve and develop the high natural values of the landscape.

Visitors from Norway. Participants from the Nordhordland Biosphere Reserve, Norwegian Unesco, the University of Bergen and the municipality of Alve visited to draw inspiration from Vattenriket's efforts in education, communication, ecosystem services and cooperation with researchers and landowners. A couple of weeks later, the naturum educator went to Nordhordland in Norway to participate in a UNESCO School Network meeting.

Restoring the health of the Baltic Sea. Wetlands to help reduce nutrient run-off, eelgrass meadows where fish can find shelter and food, spawning grounds for pike as well as the educational tool Baltic Sea Compass. These were some of the tangible results that the colleagues in the Stockholm Archipelago and the High Coast in the Återskapa Östersjöns Livskraft project experienced when they visited Vattenriket.

Conference with the EuroMab network. EuroMab is a network for the exchange of good ideas. This year's conference was held in the Nockberge Biosphere Reserve in Austria. Vattenriket was among the biosphere reserves from 27 countries that met to develop local solutions to global challenges.

Naturum meeting in the north. Every year, Sweden's naturum centres come together to exchange experiences. This year's meeting was held at the Abisko naturum centre in the far north and the focus was on climate change.

Cooperation around the Baltic Sea. Participants from nine biosphere reserves around the Baltic Sea met for three days in south-eastern Rügen. The aim was to hold a workshop on an EU application for further cooperation to improve water quality and biodiversity in the Baltic Sea within the Biosphere for Baltic network.



Workshop on the proposal for continued cooperation with the Baltic Sea Biosphere Reserves.



The Nockberge Biosphere Reserve in Austria

17 PARTNERSHIPS FOR THE GOALS



The year in review



Houses for the bats of Vattenriket

During the year, the LONA project Bats in Vattenriket was launched. This project aims to spread knowledge about bats to the public through field excursions and advice on how to benefit bats on your own land.

Throughout the year, excursions were held to inspire both children and adults to lift their eyes towards the night sky and learn about these nocturnal hunters.

Bat houses were installed in Horna Fure, and during the February break, visitors to naturum Vattenriket were able to help making their own bat houses. By spreading knowledge about bats and their role in the ecosystem, we help people get closer to nature and enjoy a more complete nature experience.



The crane gathering at Pulken has returned after the pandemic

On March 21, the County Administrative Board initiated feeding to prevent damage to spring agriculture. For the first time, there were four feedings per day. A total of 66.7 tonnes of food was distributed. At the peak of the gathering, the Bird Club of North-eastern Skåne recorded 10,200 cranes.

Crane hosts received visitors in the bird tower in cooperation with the Bird Club of Northeastern Skåne, The Swedish Society for Nature Conservation and Friends of Vattenriket. At the crane gathering on March 27, there were plenty of cranes and visitors. The nature interpreter gave information on the cranes while a Ukrainian interpreter translated. Naturum welcomed 220 students and a packed crane bus ended the season with a total of 10,942 visitors.

Also this year it was possible to experience the cranes via live broadcasts on Facebook. A new crane camera sponsored by the Friends of Vattenriket provided moving pictures for the first time. A total of 21,200 people watched the cranes via this camera.



Sand and paths inspired the new artwork at Sännaskolan Primary School

The name of the school is derived from the surrounding landscape. A piece of new artwork highlighted the unique sandy soils. Kullarna (The Hills) is a piece of land art inspired by the dunes of Gropahålet and the paths of Sännarna.

Artist Pia Sandström was inspired by the dune landscape of Gropahålet and the paths of the Sännarna Nature Reserve. The work is a so-called land art piece, the first in the municipality of Kristianstad. It is made out of sand and calcareous soil from the area. The soil holds a natural seed bank that surfaces as children move over the hills.

The artwork was inaugurated on June 9. In time, it will be covered in blossoming sand plants with a delightful fragrance. As the land reverts to sand, wild thyme, viper's bugloss and hoary alyssum can take hold and be of great benefit to biodiversity.



Grodleken (The frog game) aroused movement and curiosity

Jump like a frog. Crawl like a caterpillar. Drum like a woodpecker. The new nature activity trail Grodleken inspires the desire to be active and learn about the exciting animals of Ekenabben.

Grodleken is part of the LONA project Tre bubblare along the SL6 Vattenriket subtrail of Skåneleden, a project that aims at making it easier for children to experience nature and culture near urban areas.

Grodleken is a trail with five stations offering various activities. At the start, an oak frog welcomes you, and further on, wooden birds hide in the alder wetland forest. Grodleken was inaugurated on Friday, June 3. Children from the Nature Preschool Sally were present, as well as municipal commissioner Pierre Månsson. Anyone who felt the urge could jump like a frog, crawl like a caterpillar, hunt like a bat, drum like a woodpecker and scout for prey like a sparrowhawk. Pastries in the shape of little frogs were served as refreshments.

The year in review

World Environment Day was celebrated with an exhibition on the Baltic Sea

Fifteen large scale photos of the life in the Baltic Sea. Above and below the surface. From north to south. From sweet to salt. During the summer, the exhibition The Baltic Sea – from sweet to salt by photographer and biologist Johan Hammar was shown in the park adjacent to the Aosehus castle ruin in Åhus.

The way we treat rivers, wetlands, lakes, forests and other ecosystems on land affects the status of the Baltic Sea. Through cooperation, long-term and determined efforts, wise decisions and measures on land and at sea, the Baltic Sea can recover.

Vattenriket has been working for several years to restore wetlands and streams. At the same time, work is being done to increase public awareness and involvement. During the photo exhibition in the summer, the values of the sea were highlighted for tourists as well as local residents. It opened on the World Environment Day on June 5 with funding from the Swedish Environmental Protection Agency and the WWF project Återskapa Östersjöns Livskraft (Restoring the health of the Baltic Sea).



Mötesplats Biosfär yielded new ideas for research

For three days, around 100 scientists, policy makers, donors, students and other stakeholders gathered to explore how biosphere reserves can serve as local arenas for research and innovation to achieve the UN's Sustainable Development Goals. The conference was held simultaneously and jointly in Umeå and at naturum Vattenriket. A series of exciting presentations and speed talks reflected areas where research is underway and where more knowledge is needed. The excursion in Vattenriket and Storkriket showed examples of biosphere work and research. Roundtable discussions provided ideas on how research and innovation can contribute to the change towards a sustainable society. In her speech, Shamila Nair-Bedouelle, Assistant Director General for the Natural Sciences of UNESCO, highlighted the importance of biosphere reserves in increasing the understanding of biodiversity and ecosystem services, finding nature-based solutions and restoring ecosystems. She urged higher education institutions to deepen cooperation with biosphere reserves.



The SL6 Vattenriket trail of Skåneleden reached LerjevalLEN

During the summer, the popular hiking trail Skåneleden returned to LerjevalLEN. At the same time, the area received a new campsite. The trail and the campsite are the result of a collaboration between several organisations working with outdoor life. LerjevalLEN is a popular outdoor recreation area and there was already some infrastructure in place. With the return of Skåneleden, the area was reinforced with a brand new campsite south of the lake at the foot of the former slalom hill.

The new campsite has two new shelters, a barbeque area and a woodshed and allows more people to get out and enjoy nature in LerjevalLEN's beautiful outdoor recreation area. With the campsite, the SL6 Vattenriket subtrail of Skåneleden is completed in the northern part of the municipality. The project progresses and the trail will be fully completed in 2023, when there will be a hiking trail from LerjevalLEN in the north to Drakamöllan in the south.



Explore nature with the help of Naturkartan

The Biosphere Office and the Culture and Leisure Department teamed up to join the Naturkartan app. Together, we compiled information on trails, visitor sites and barbeque areas. Naturkartan is a digital guide to the outdoor life that makes it easy to find all nature areas, trails and outdoor facilities. Here visitors can easily plan their trips to outdoor recreation areas, visitor sites, bathing areas and other green and blue destinations. Information and tips about Vattenriket are collected in a separate guide in the app. Naturkartan is a great addition to the existing material for finding your way around Vattenriket. Naturkartan is an app as well as a website with information about marked trails, parking, toilets, bathing areas and anything that is worth knowing for those who venture into nature. Visitors can see their location and easily follow trails and paths, become a member and comment and interact with other users.



<https://www.naturkartan.se/sv/vattenriket>





The Årummet Outdoor Museum burnt to the ground

Since its opening in May 2019, the Årummet Outdoor Museum has become a popular destination for visitors. Around 150,000 people have walked out on the boardwalk through reed and willow to reach the hide with a view of the naturum lake and all its plants and animals.

Last autumn, the Årummet Outdoor Museum burned to the ground. It was quickly decided that it should be rebuilt. By the end of the year, the cleanup of the area had already begun. If all goes well, the outdoor museum could reopen by the summer of 2023. The appearance and function will be maintained with some minor improvements. The plan is to increase the surface area of the boardwalk leading to the hideout. We will also review the possibility of making it possible to stand up in the hide while observing the lake.



Field trip to study leaching of iron and aluminium

Efforts to reduce the effect of leaching from embankments on peat soils took a step forward with a field trip to Denmark. The summer floods of 2007 left deposits of iron in the meadows around River Helge and Lake Hammarsjön. The vegetation was discoloured and grass growth was impaired. The situation did not improve. In 2016, the County Administrative Board of Skåne, in cooperation with Kristianstads Vattenrike, received funding from the Swedish Environmental Protection Agency to study the extent and effects of iron and aluminium leaching from embankments, including those along River Helge. The results showed alarmingly high levels of iron and aluminium near Fredriksdalsviken. Turning embanked agricultural land into wetlands and leaving the soil under water is one method of removing precipitates of iron and aluminium. Another method used in Denmark is to establish sedimentation ponds so that the soil particles can be deposited before reaching the river.



Grazing on Horna sandar for a more open landscape

A more open landscape was created at Horna sandar north of Åhus. Sand and sun-loving fungi, flowers and insects will thrive here. During the winter, pine trees and bushes gave way to some 30 patches of exposed sand and a 300-metre slope in the meadow grazed by horses in the north of the nature reserve.

The area is very rich in species. Now it's becoming home to even more species as wild thyme, spiked speedwell and sand pink flourish. Hopefully, dwarf everlasting, blue hair grass and sand timothy will also start growing there. These plants will in turn attract butterflies and wild bees to the area.

The initiative was funded through a government assignment to protect wild pollinators, where the County Administrative Board of Skåne has allocated 243,600 SEK to the Kristianstads Vattenrike Biosphere Reserve. When the snow fell, four-legged conservationists in the form of cows were released to graze.

Kristianstads Vattenrike Biosphere Reserve
– benefiting nature and people

Read more on our homepage, where you will also find contact details
vattenriket.kristianstad.se