

# Kristianstads Vattenrike Biosphere reserve

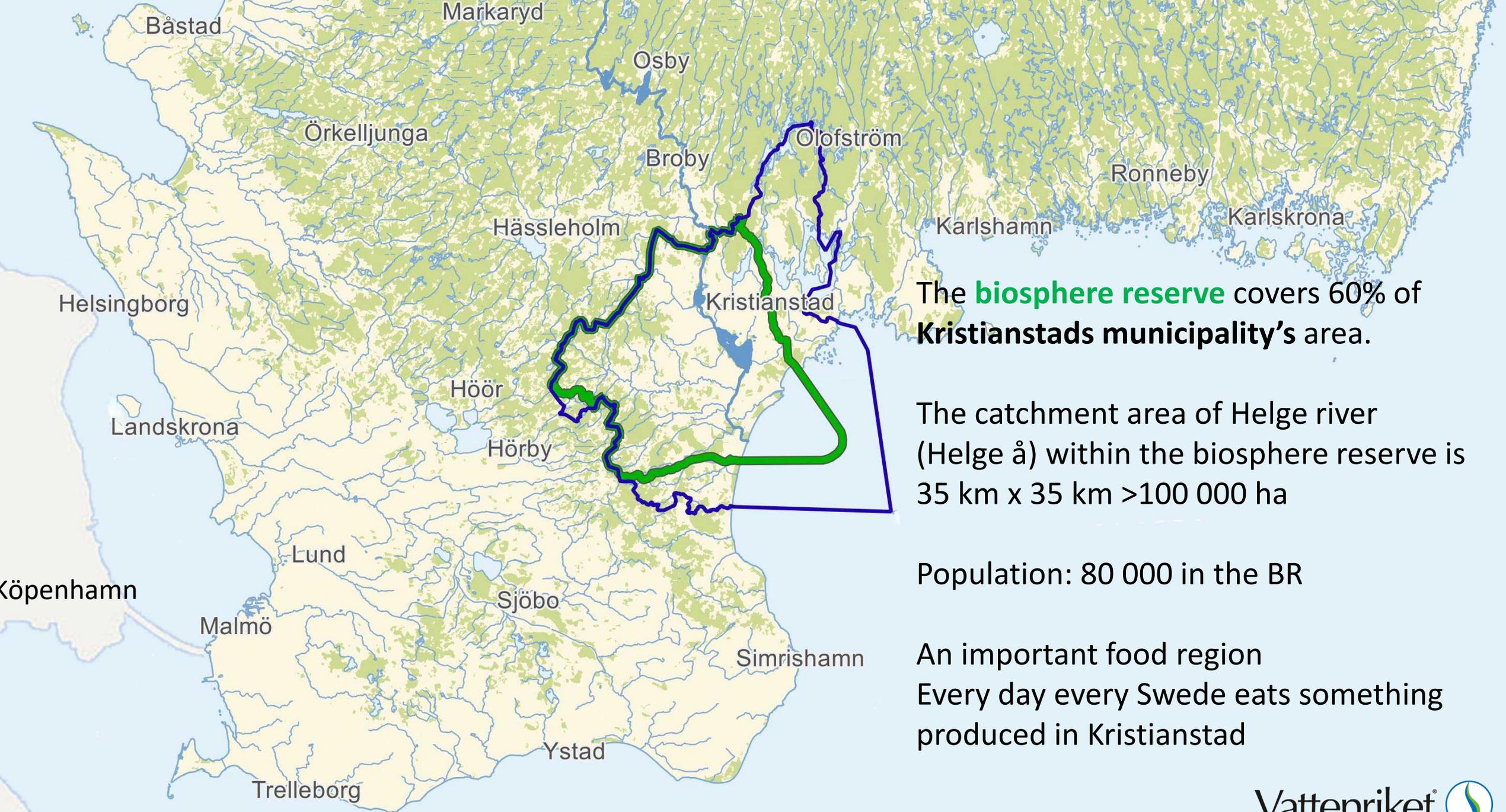
- Celebrating 20 years in 2025



Vattenriket® 



Kristianstads  
kommun



The **biosphere reserve** covers 60% of **Kristianstads municipality's** area.

The catchment area of Helge river (Helge å) within the biosphere reserve is 35 km x 35 km >100 000 ha

Population: 80 000 in the BR

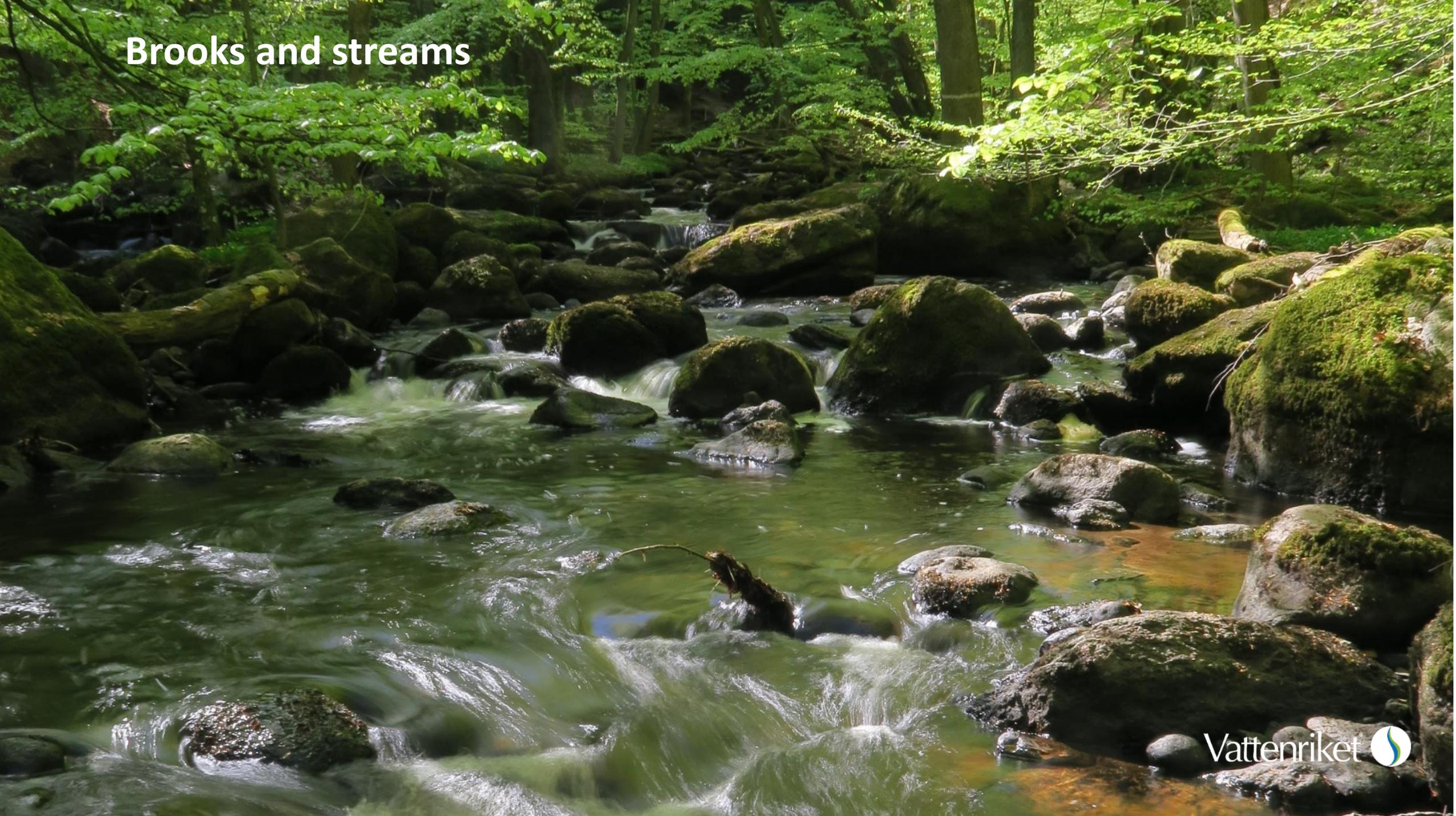
An important food region  
Every day every Swede eats something produced in Kristianstad

the landscape changes with the water level

# Wetlands along the river Helge å



# Brooks and streams



# Forests and woodlands



# Sandy pastures



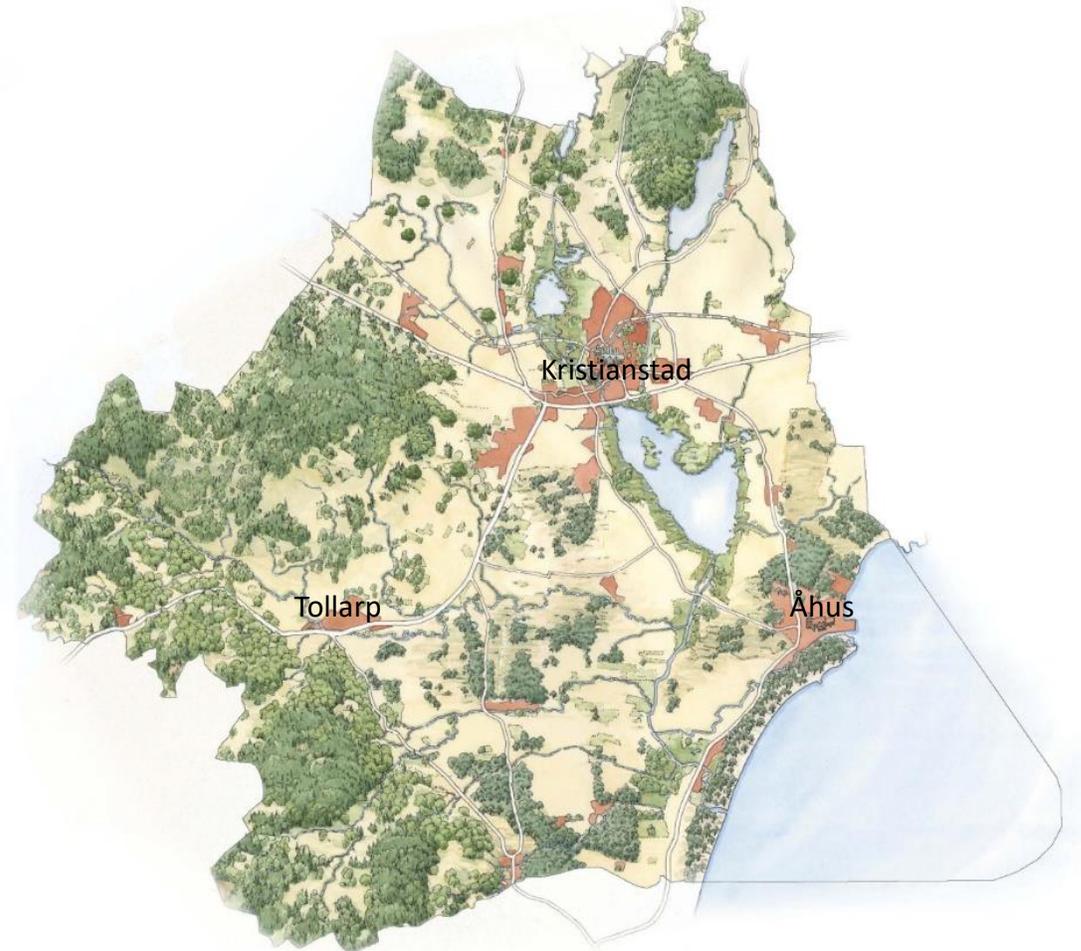
# Coastal dune landscape



# Vattenriket – Extraordinary rich in wildlife



# Kristianstads Vattenrike - the first of seven swedish biosphere reserves, designated in 2005



# Biosphere Reserve Kristianstads Vattenrike – commissioning bodies

Responsible  
authority



Kristianstads  
kommun

Mission and  
certification



**unesco**

Biosfärområde

The brand and  
guidelines for  
naturum





# Kristianstad's water-rich history – a fortress on the water



City of Kristianstad 1614

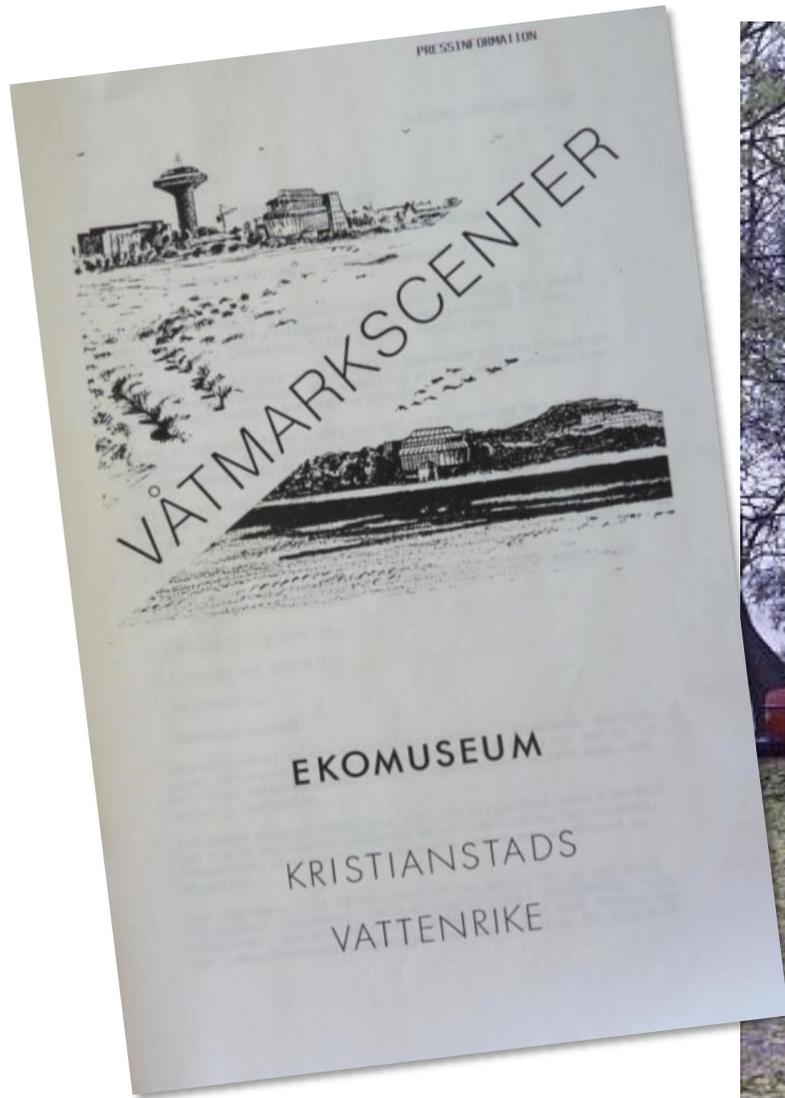
# Water-sick: the wetlands were used to dump garbage

*The board of sanitation consider it urgent that the water-sick and unhealthy bogs are sanitized (...) provided that no disturbances can be expected and the garbage facility is managed in good order.*

Kristianstad board of sanitation 1958



# Changing attitudes from water-sick to water-rich



Vattenriket 

Kanalhuset outdoor museum september 1st 1989

# Naturum – proof of changing attitudes



# 2nd Periodic Review to Unesco



## Biosfärområde Kristianstads Vattenrike

Utvärdering enligt Unesco 2015–2025



# Goal 17 and 17 good examples 😊

- Reaching the SDG:s together

The Biosphere work is an important actor in the work towards achieving goal 17 by bringing together research, business and society, running projects locally and collaborating globally





# Involvement for all ages

We train biosphere ambassadors, organize biosphere camps and invite scouts to become biosphere heroes. Strong partnerships with associations and the consultation group are other ways to engage, and anchor our work.





# Nature-based solutions

Fredriksdalsviken is home to Sweden's first constructed wetland to use natural processes to reduce levels of iron and aluminium in drainage water. The project is a collaboration led by the Biosphere Office.





- Old wetland/meadow, the embankment was build in the 1950's, sulfide sediments
- The embankment dewateres 300 ha
- Grows potatoes, sugar beet, wheat – wellpaid crops
- Cultivation safe (both wet and dry years)
- Pump 30 kbm/min , the soil become oxygenated and acidic sulfate soils are formed, leaching metals...
- Rewetting of the farmland? – not an option... 1,5 milj euro...



## Nature based solution

- Pilot wetland facility; residence time for the water 8-10 h
- Deep cavities where the iron is sedimented.
- Removes the toxic levels of iron
- The water is then released into the nature reserve and its recipient
- Remove iron sediment from the ponds as needed
- Monitoring and evaluation, collaboration with two universities



# Easy access to Vattenriket

Visitor centres, trails, bird towers, picnic areas and outdoor museums increase access to the area. Making it easy to experience Vattenriket's biodiversity increases understanding for conserving and caring for it.





# Tradition and innovation

In close dialogue with landowners and land users, we make use of local knowledge and develop new methods to conserve important natural values. Innovation and collaboration are the key to a thriving cultural landscape.





# 360 degree projects

We work on projects that span nature conservation measures, research, education, public activities and communication. One example is Restoring the health of the Baltic Sea.



# Restoring the health of the Baltic Sea 2020-2024



Samarbetar  
för att återskapa  
Östersjöns  
livskraft



Länsstyrelsen  
Stockholm



Länsstyrelsen  
Västernorrland



SKÅRGÅRDSSTIFTELSEN



SportFiskarna

Vattenriket 

Vattenriket 



Kristianstads  
kommun



Actions



Engagement & knowledge



# Wetlands for improved water quality

📍 Vista gård

Vattenriket 



”Streets” in reed  
improved fish  
biotopes

📍 Gropahålet

Vattenriket 



# Pike meadows for improved reproduction



📍 Kavro



# Planting eelgrass

# Engagement and knowledge



# Outdoor classroom the Baltic Sea



# Baltic Bioblitz

Species Hunt where experts and amateurs work together to find as many species as possible.

143 species, 300 participants



 Snickarhaken, Åhus



Vattenriket 

# Business breakfast on the theme of sustainable enterprise and a thriving Baltic sea



# Photo exhibition by Johan Hammar "The Baltic Sea – From Fresh to Salt"



Åhus hamn



Vattenriket 



The sea moved into the Naturum exhibition

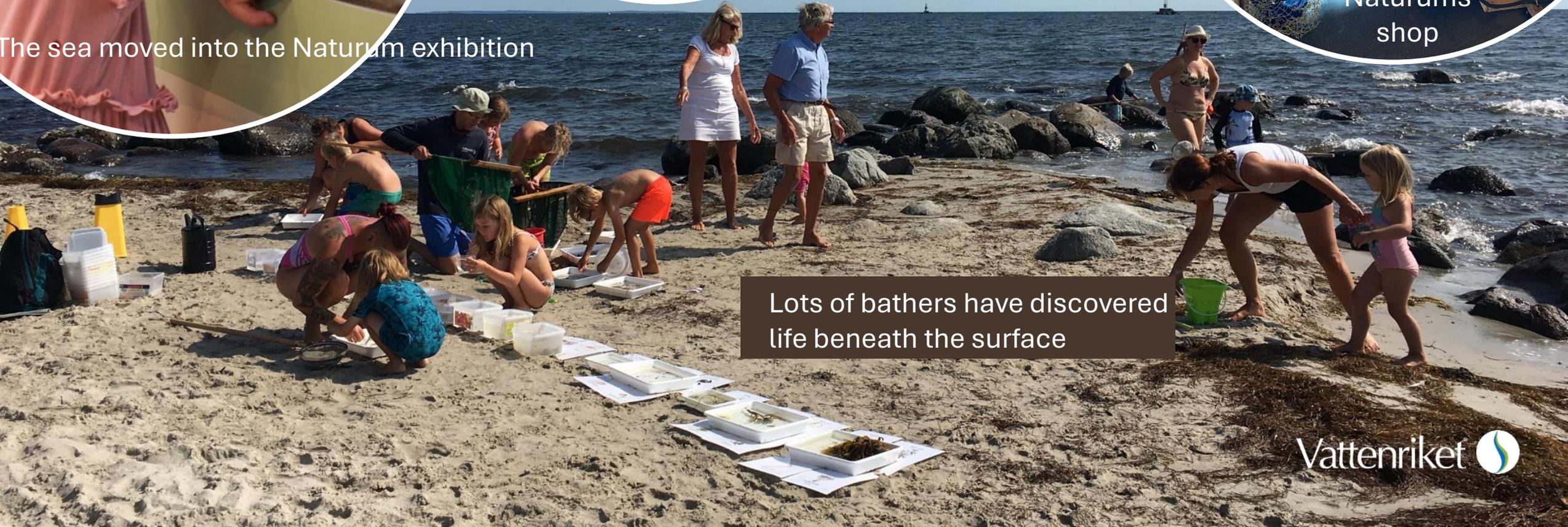


The Ocean Wheel – one of many program highlights about the sea

# Theme Sea



Naturums shop



Lots of bathers have discovered life beneath the surface



# naturum Vattenriket



The biosphere reserve's visitor centre is in the middle of town and in the middle of the wetlands. Its exhibition and wide range of activities attract 90,000 Kristianstad residents and visiting tourists every year.



Vattenriket



# From preschool to university

Naturum Vattenriket offers outdoor education for all ages, from playful contact with nature to research. Biosphere classrooms and new educational tools provide support for teachers.

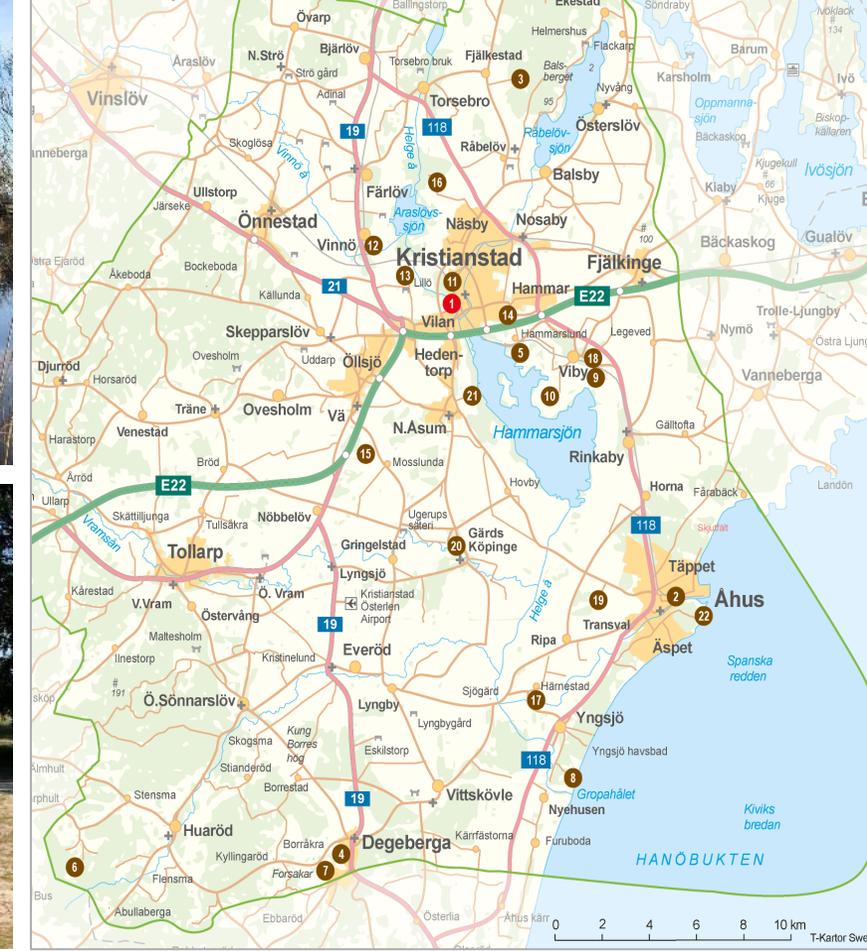




# Learning in the landscape

Our visitor sites are places for learning and inspiration. Here, nature enthusiasts can gain new insights, teachers and students can explore nature and nature-based solutions for conservation can be shared.





21 visitors sites attract people from near and far

# Hope inspires new attitudes

Our long-term goal is to change attitudes for more sustainable development. We aim to inspire inner transition by communicating hope and positive experiences of nature. The What if method is one example.



**GLOBALA MÅLEN**  
för hållbar utveckling

Vattenriket



# Adaptive co-management

Wetlands are constructed in discussion and collaboration with landowners. Together we find suitable sites and methods, apply for funding and implement measures that we evaluate, adapt and develop.



- 
- 10 ha large wetland
  - One part for irrigation and one part for nutrient retention and biodiversity
  - “light” sandy soils, ex. root crops are cultivated
  - drainage area of 300 ha
  - Instead of drilling a new well for irrigation, the farmer contacted us, and we found a solution using surface water, a NBS solution
  - The water comes from drainage pipes and a couple of smaller embankments
  - 100 ha are irrigated with water from the wetland
  - A more resilient solution!

Monitoring and evaluation are important!

- Lessons to be learned:
- [Lärdomar från våtmarksarbete \(youtube.com\)](#)
- [Rubrik \(kristianstad.se\)](#)



Vattenriket   
Biosfärområde Kristianstads Vattenrike





Vattenriket i fokus 2024:02

**Lärdomar från våtmarksarbete**  
Uppföljning av 66 våtmarksprojekt

Per Torstensson, Mattis Vindelmann





# Ideas in a changing climate

Drained peatlands leak greenhouse gases. Raising the water level in the soil can reduce carbon dioxide emissions. The Biosphere Office has blocked ditches on Fjällmossen, restoring 2.5 hectares of wetland.



# Networking internationally

We are an active partner in the Biosphere for Baltic network, with twelve biosphere reserves in eight countries on the Baltic Sea. In 2025, a Youth Forum will be held in Vattenriket with young adults dedicated to the sea.



*Good for both nature and people!*

17 PARTNERSHIPS  
FOR THE GOALS



Vattenriket 

# Thank you for listening!

Carina Wettemark

Coordinator and manager of the Biosphere Office

[carina.wettemark@kristianstad.se](mailto:carina.wettemark@kristianstad.se)

[vattenriket.kristianstad.se](http://vattenriket.kristianstad.se)

 NaturumVattenriket

 vattenriket



Vattenriket 



Vattenriket 