



HÅLL SVERIGE RENT®



The Baltic Sea

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Keep Sweden Tidy
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A unique sea under pressure

- The world's second largest inland sea
- It takes 30 years for the entire body of water to be replaced
- 85 million people lives in the Baltic Sea drainage area



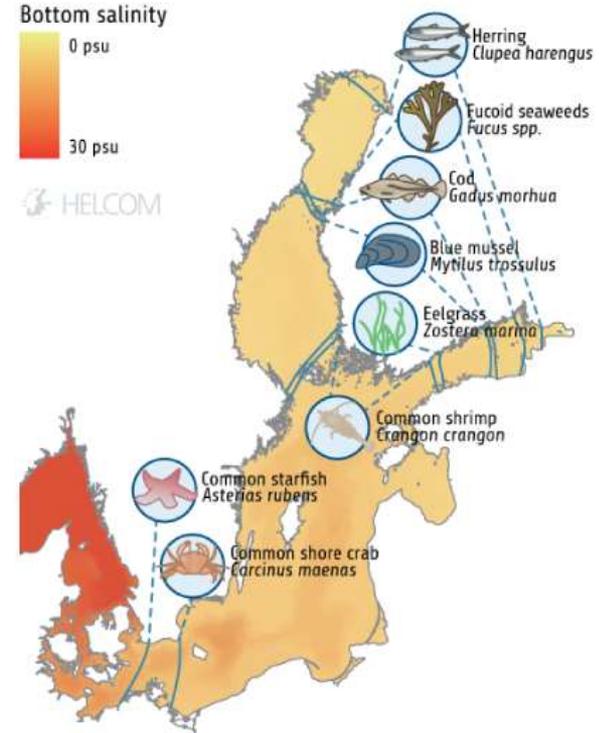
Physical factors, the limit for life

- Salinity
- Oxygen
- Light



Salinity

- Brackish water stresses both marine and fresh water species
- Salt sea water brake-in comes from the North Sea through the narrow strait of the Sound and the Belt - on average every ten years
- The freshwater in the Baltic Sea comes from over 200 rivers and streams in the entire river basin



Salinity



Picture from Baltic Sea Center



Oxygen



- The saltwater break-in brings fresh oxygen to the Baltic Sea
- Stratification reduces the ability of the water to mix and prevents oxygen-rich water from reaching the deep bottom
- The decomposition of organic matter requires oxygen and contributes to oxygen depletion
- For 2018, HELCOM notes that no basins achieved GES related to oxygen levels

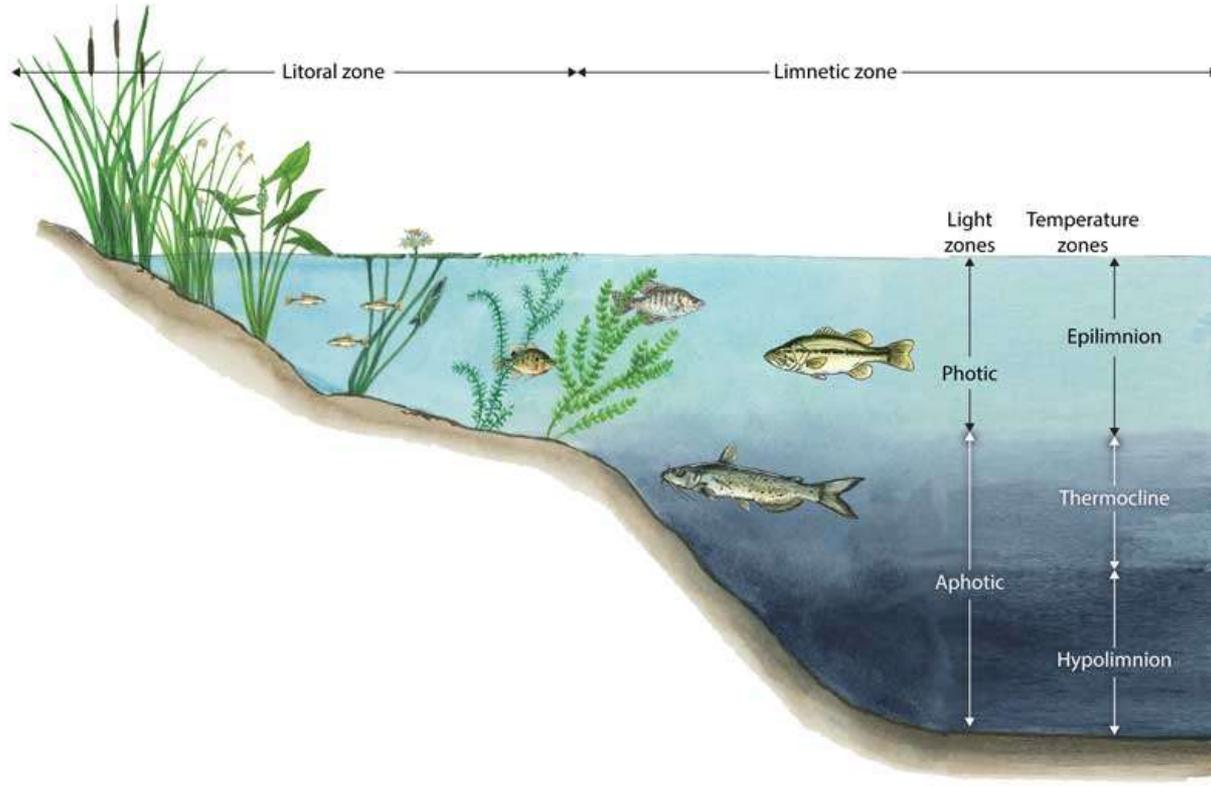


Light

- Light affects the deep distribution of algae, plants and microalgae
- The photic zone is the uppermost layer of water in a lake or sea that is exposed to intense sunlight
- Visability can be very poor in muddy water, but up to 30 m in the open sea



Light



Climate



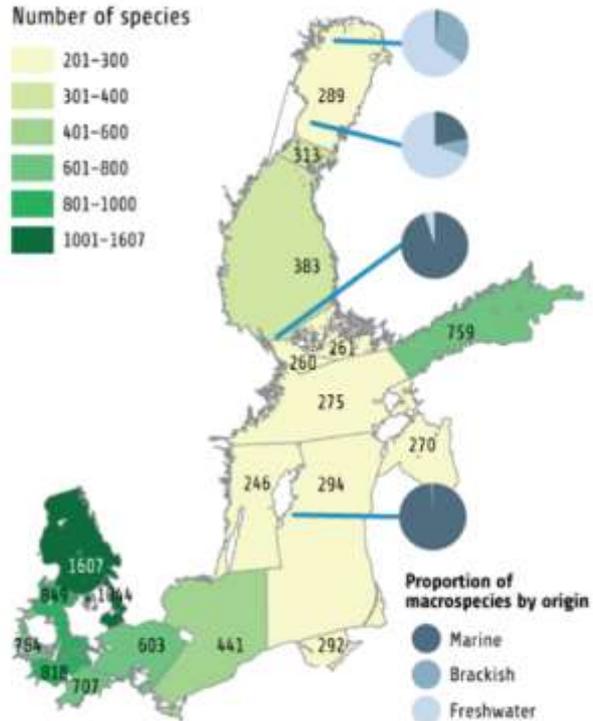
Bottom types

The bottom environment is the foundation on which the entire ecosystem rests.

- Shallow soft bottom
- Shallow hard bottom
- Deep soft bottom
- Deep hard bottom



Biodiversity and resilience



- The physical conditions limits the number of species
- The number of species limits the ecosystems ability to cope with stress
- The Baltic Sea has low biodiversity and is a sensitive and vulnerable ecosystem



The Baltic Sea food web

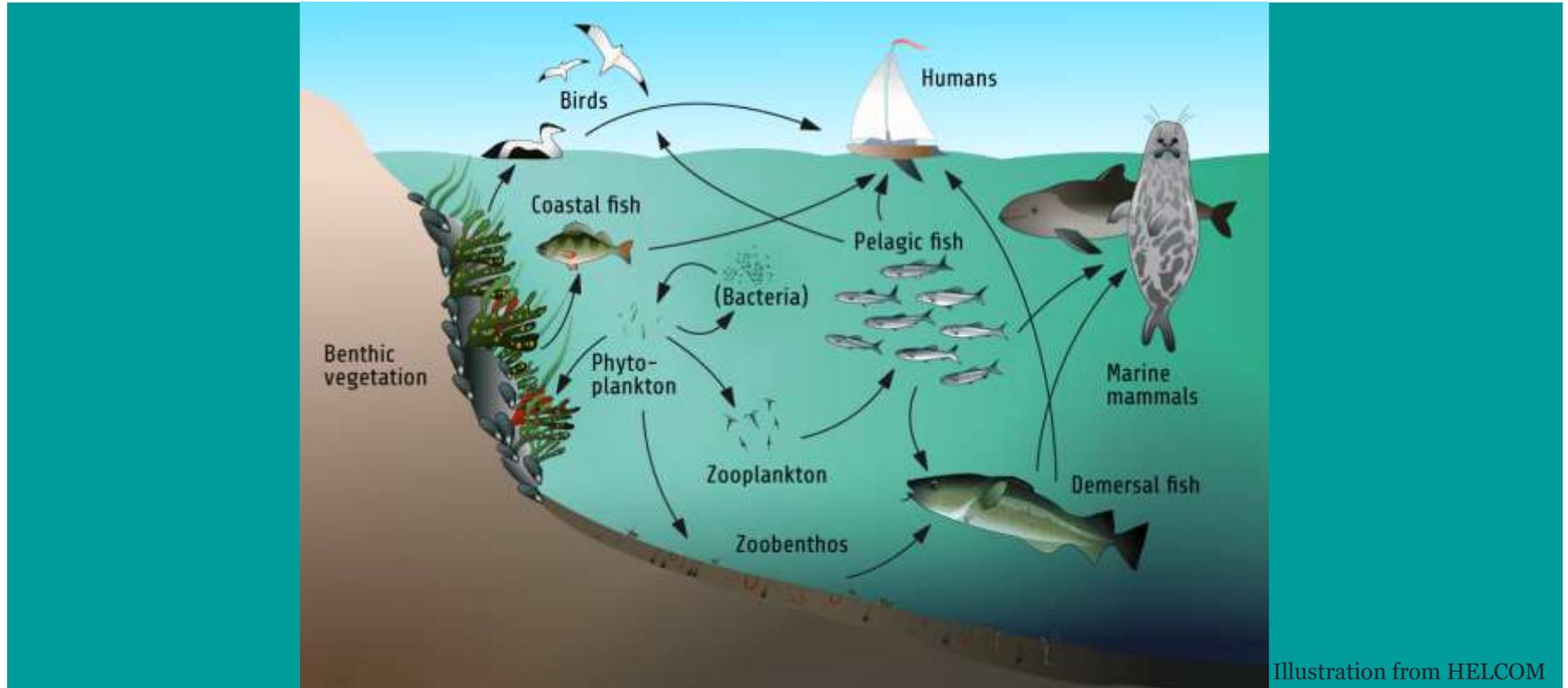


Illustration from HELCOM





Thanks for listning!





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