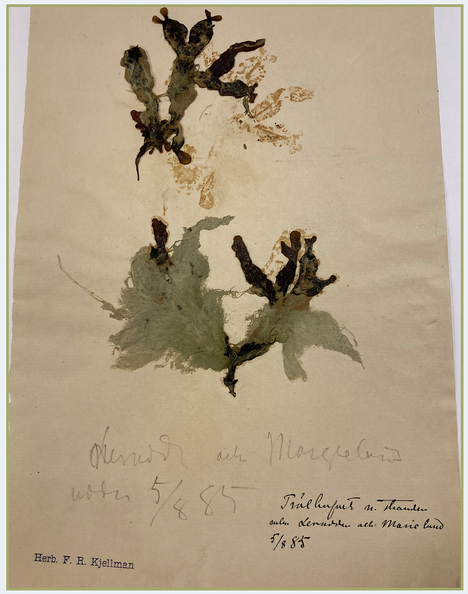
Epibiotic cover on bladderwrack in Trälhavet

1885



Around 50% coverage of green filamentous algae.

1968



Just under 50% coverage, almost exclusively of green and brown filamentous algae.

1990



About 65 % coverage, mainly by filter-feeding animals such as the introduced species Cordylophora caspia *and barnacle.*

2001



The epibiotic coverage has decreased to around 35 % and constists mainly of filter feeders such as bryozoans and barnacle.

2020



The bladderwrack is larger, indicating that the environment has been favourable throughout its life. Around 30 % is covered by a variety of species.

During the **19th century** and onwards the population of Stockholm steadily increases. As a result of untreated wastewater, increasing amounts of nitrogen and phosphorus reach the sea and cause eutrophication.

In the **1970s**, chemical treatment of wastewater is introduced which reduces the input of phosphorus to the sea.

Secchi depth: 1,5–2 metre.

In the first half of the **1990s**, nitrogen removal is introduced at wastewater treatment plants, significantly reducing nitrogen inputs.

Secchi depth: 3–3,5 metre.

In the **2020s**, phosphorus levels in the sea have decreased to 20 µg/litre, which corresponds to the levels at the beginning of the 20th century.

Secchi depth: 4–5 metre.