

Our translation of our letter to the editor "*Brist på strömmingen gör laxen i Östersjön sjuk*", published in *Hufvudstadsbladet* in Finland October 6, 2025.

## **Lack of Baltic herring makes the salmon in the Baltic Sea sick**

**It is often said that everything is connected, and this is true for the fish that live in the Baltic Sea. The collapse of cod in the 1990s caused the stock of sprat to grow. This resulted in an increased commercial fishing of the Baltic herring which led to a sharp decline of the population. The salmon ate more sprat, got sick and the salmon population also decreased.**

This story started when Finnish researchers in 2023 discovered that very few salmon returned to the Torne and Simo rivers to spawn, and this despite that a normal amount of salmon fry had migrated down to the Baltic Sea the previous year. Something was not right. A scientific article published in 2025 by Finnish researchers ([Keinänen et.al.](#)) provides a probable explanation.

Most salmon that migrate out of the rivers into the Gulf of Bothnia, migrate further into the Baltic Sea to grow to maturity. During their first year in the Baltic Sea salmon will eat one-year old herring fry, and one- to three-year old sprat. Thereafter small herring will be better food for them, due to that the one- to three-year old sprat contain twice as much fat as the herring. Too much fat has been shown to cause a deficiency of thiamine (vitamin B1), which impairs the survival of the young salmon.

In 2021 and 2022 the ratio between herring and sprat was particularly low, and the young salmon thus ate more of the fat and thiamine poor sprat. This can explain why less salmon migrated up the Torne and Simo rivers in 2023. The disease M74, caused by a deficiency in thiamine will result in a higher fatality rate and impaired reproductive capacity in sexually mature adult salmon.

**“Therefore, the herring population must be allowed to grow in order to save the salmon in the Baltic Sea.”**

Since the 1990s, there have been more sprat than herring in the Baltic Sea, and thus also more sprat than herring in the diet of young salmon. But why has it become like this?

There are several possible explanations for this, but the most important cause is the collapse of the cod in the Baltic Sea, and the industrial overfishing of herring. Sprat is the main food for cod, and high growth of sprat was seen when the cod collapsed. Simultaneously, herring became the most important commercial fish when the cod disappeared, which led to a very high fishing pressure on herring.

The herring population decreased and the amount of sprat increased. Therefore, the population of herring must now be allowed to grow to save the salmon in the Baltic Sea.

In the end of October our fishing quotas in the Baltic Sea for 2026 will be decided. To save the salmon it is very important that the quotas for herring will be strongly reduced. Finland and Sweden catch 75 percent of all herring in the Baltic Sea, and our opinion will have an important influence on how large the total quota for herring will be.

It is now up to our ministers to together do what is necessary to save the salmon.

We have to see what they decide to do.

Text

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