



# Culprits or victims?

How **seals** have **limited impact on fisheries** but face **threats from fishing practices**

Seals are often portrayed as a threat to EU fisheries, but scientific evidence shows their impact on fish stocks is insignificant compared to overfishing, habitat degradation, and pollution. Rather than being culprits, seals are increasingly vulnerable, suffering the consequences of human-driven pressures on marine ecosystems. Besides, their targeted impact on certain fisheries activities, in particular damage on fishing gear, can be mitigated with non-lethal methods.

## The fragile status of seals in the Baltic Sea and the EU

Following the entry into force of the EU Seal Regime (Regulation (EU) 1007/2009), seal populations have increased worldwide. This conservation success remains insufficient in comparison to populations before the introduction of commercial hunting in the 20th century, including 180,000 ringed seals that populated the Baltic sea. Current populations present low annual growth rates incompatible with a good status of the species, as defined by HELCOM. Two seal species, the Mediterranean monk seal and the Hooded seal are still listed as vulnerable on the IUCN Red List. In parallel, the Saimaa ringed seal, living in Finland, is considered the most endangered seal species in the world. In the Netherlands (and the Wadden sea in general), Harbour seal populations are now stagnating, supposedly because of high mortality rates in seal pups.

None of the three seal species of the Baltic achieved a good status

## The seals of the Baltic Sea



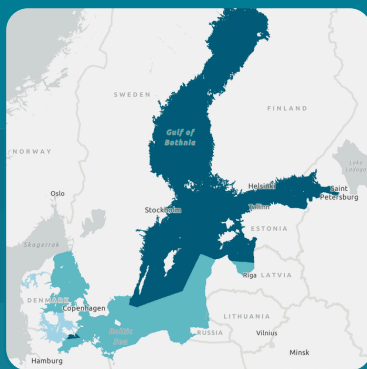
Grey seal



Ringed seal



Harbour seal



~60,000  
x3 since 2009

Annual population growth rate for 2003-2021 was 5.1%, below the 7% threshold value.



~15,000  
x2 since 2009

Both sub-populations in the Baltic failed to achieve a good status.



~2,900  
x4 since 2009

The total number of individuals is far from the target of 10,000.

## Seals and EU fish stocks: understanding the real pressures

Some Member States, primarily on the coasts of the Baltic Sea, raised concerns about the impact of seals on fish stocks. Although growing populations could result in increased pressure, **studies indicate that this impact is insignificant compared to other threats affecting fish supply, especially fisheries, salinity and temperature**<sup>1</sup>. As such and because they are predators, seals' presence can rather be associated with fish abundance. Seals are blamed for the reduction of fish stocks and the management of their populations would not guarantee the continuous availability and quality of fish while these claims are not scientifically proven.

## Seals as victims of fisheries and anthropogenic activities

Seals are highly vulnerable to fisheries activities, especially by-catch. They can be entangled in fishing gear leading to injury or a painful death. From the analysis of 2012 bycatch numbers in 3 different countries, it is estimated that on average 2000 grey seals are caught yearly in Baltic fisheries<sup>2</sup>. In 2017, an unusual mortality event affected Baltic grey seals along the German Baltic coast, with the death of 23 healthy, well-nourished adult males, likely as by-catch in a fyke net<sup>3</sup>. **Seal Excluder Devices (SEDs), including pontoon traps with grey seal safe slit entrances can be used to reduce this risk.**

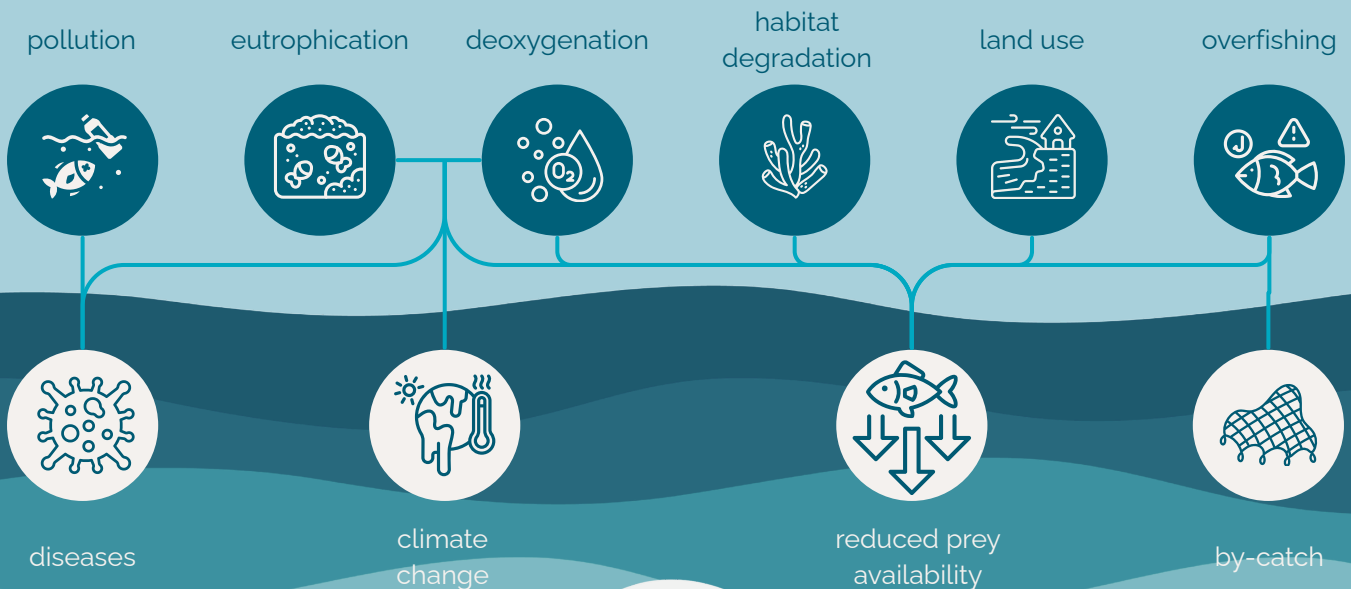
They are threatened by other human-induced pressures including climate change. Several seal species, including hooded seals, depend on ice for pupping, moulting and resting. The reduction of ice thickness and coverage duration can disrupt subnivean lairs, leaving ringed seal pups vulnerable to severe weather and higher risks of predation, being correlated to a significant decline in reproductive success<sup>4,5</sup>. Warmer climate also negatively impacts the body conditions of seals because of a reduction in prey availability<sup>6</sup>.

They can also be affected by zoonotic diseases. Outbreaks of phocine distemper virus (PDV) have caused the death of 30,000 harbour seals in 2002 and **the possibility of future outbreaks cannot be ruled out**<sup>7</sup>. An Avian influenza outbreak in spring 2014 in Sweden and Denmark is estimated to have caused total mortality of approximately 10% of seal populations. Besides, the pollutants and concentration of heavy metals, such as mercury (Hg), lead (Pb) and cadmium (Cd), and exposure to harmful algal toxins have severe effects on the health of seals with reduced reproductive success and even death<sup>8,9</sup>.

**In 2012, by-catch killed 7% of the grey seal population of the Baltic Sea**

## Pressures on the Baltic sea and seals

*The State of the Baltic Sea 2023 report*



## The socio-economic and environmental benefits of seals

Notably, in the few Member States where issues of coexistence with seals have been identified, they are primarily raised by fishermen or hunters and not by the wider population. There is continuous support of EU citizens towards the protection of seals, in line with the strong opposition towards the hunting and trade in seal products (see [survey](#) conducted in 2023).

Seals bring significant benefits. Seal watching tourism generated approximately 9.85 million SEK (876,000€) and provided 64 full time jobs in Sweden in 2017<sup>10</sup>. Given the **increased popularity of seal tourism activities**, the Danish Environmental Protection Agency established guidelines for seal-friendly tourism.

Importantly, **seals are top predators filling an essential role for the health of the ecosystem**. For example, seals prey on round gobies, an invasive alien species present in the Baltic Sea and greatly impacting the ecosystem and fisheries resulting in the depletion of blue mussel colonies<sup>11</sup>.

Harbour and grey seals are two of the key wild animal species identified contributing to **nature-based solutions against climate change by increasing the capture and storage of carbon in the ecosystems they populate**<sup>12</sup>. Predation by seals also reduce density-dependent competition among the fish, promoting increased fish growth and partially offsetting the decrease in fish numbers<sup>13</sup>.

## Methods available to mitigate the targeted impacts of seals on fisheries activities

Despite their insignificant impact on the global scale, seals can locally affect capture fisheries or aquaculture. Seals can bite and tear through fishing nets, especially gillnets, to reach the fish trapped inside, causing damage that renders the nets unusable until repaired. Seals can also breach containment nets of unprotected fish farms to prey on the fish inside. Non-lethal methods are available for the fishing industry to mitigate these impacts<sup>14,15</sup>. **Alternative and seal proof fishing gear, such as mini-seine nets, can be used on small-scale fisheries, and fish pots can be used as an alternative to gillnets**<sup>16</sup>. Acoustic deterrent devices (ADDs) targeting seal species can be used to keep the seals away from fishing gear, grounds and aquaculture farms. However, it is essential to remain vigilant and ensure that the use of ADDs does not negatively impact non-target species. This technology also has the potential to reduce by-catch of seals and other marine mammals. Continuous efforts should be put into the research, development and implementation of preventive measures contributing to the leadership of the European Union in innovation.



Seals provide countless benefits from tourism to carbon sequestration and Invasive Alien Species management

## When is lethal management justified?

Lethal control is irreversible and as such should be used with extreme caution. The IUCN SSC guidelines on human-wildlife conflict and coexistence provide that it should only be considered as a last resort. The International consensus principles for ethical wildlife control recommends to first modify human practices associated with the conflict and adequately justify lethal control.

Under the Habitats Directive, the Mediterranean monk seal (*Monachus monachus*) and the Saimaa ringed seal (*Phoca hispida saimensis*) are listed under Annex IV (strict protection) while all other species of seals are listed in Annex V and are protected. Lethal management should be controlled so that it does not affect the favourable conservation status of the species, considering current populations and prospects. Because of their fragile population trends, seals should not be granted a favourable conservation status in the Baltic Sea.

**Importantly, lethal management can have a detrimental effect. HELCOM notes that hunting in remote areas can make seals move to areas where they can cause more conflict.**

Besides conservation aspects, seal hunting is particularly cruel. Seals must be shot in the head so that the animal is not lost in the sea but the kill zone is very small and hunters need best accuracy, which is difficult acknowledging that seal hunting takes place in large water bodies.

## Our recommendations

Seals are victims of anthropogenic pressures, including overfishing and climate change, reducing their prey availability, contributing to reduced growth rates and increased mortality. Facilitating the lethal management of seals is not a solution to protect fish stocks. Instead, they are precious allies in mitigating the impacts of climate change, securing a healthy ecosystem and contributing to the coastal economy. In this context, we urge the EU to:

- Uphold and strengthen its commitments to protecting seals
- Provide funding for the development and implementation of innovative and efficient coexistence tools
- Monitor the status of seal populations based on latest available scientific evidence
- Apply the precautionary principle when evidence on the status of populations or threats to fisheries is inconclusive.

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