

# Welcome to cooperate with the Seals and Fisheries Program!



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## Welcome to contact us!

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**Increasing seal-fisheries conflicts around the world demands increased knowledge on seal-safe mitigation methods and fishing gears.**

**SFP cooperate and provide expertise with institutions worldwide working with fishing gear development and seal and fisheries interactions.**



**SLU Aqua**  
**THE SEALS AND**  
**FISHERIES PROGRAM**

# SLU Aqua reduces the seal-fisheries conflict in Sweden

The research group, **the Seals and Fisheries Program (SFP)**, at SLU Aqua produces a scientific base for the support and implementation of seal-safe fishing gears. Together with fishermen and manufacturers, we have been developing seal-safe passive fishing gears since the 1990's.

## Mitigation methods decreases conflicts in the seal fisheries

Sweden has a long coastline, with favourable conditions for an extensive coastal fishery. An increasing threat to the coastal fisheries is the growing seal populations. Seals damage fishing gear and catch which causes significant economic losses for fishermen.

## The Seals and Fisheries Program

- Studies seal and fish behaviour around fishing gear, knowledge used when developing seal-safe and sustainable fishing gear.
- Evaluates the operational conflict between seals and fisheries

- Evaluates the ecological conflict between seals and fisheries.
- Test and develop fishing gear together with commercial fishermen and fishing gear manufacturers.
- Gives advice and information to the public and authorities on measures intended to reduce the seals' impact on fisheries.

## Estimating economic losses of the seal-fisheries conflict

We have analysed the seal-fishery conflict and modelled the spatial and temporal economic losses due to seals in different fisheries. Our models show that damage and losses due to seals have brought large economic losses to coastal fisheries.

Both hidden and visible losses can be quantified. Hidden losses, which includes catch taken by seals without them leaving any remains and fish that escape or are scared away from gears, by far exceed the visible damage.

The Seals and Fisheries Program (SFP) is a research group at the Swedish University of Agricultural Sciences, Department of Aquatic Resources (SLU Aqua). The main goal of the program is to develop mitigation methods to minimize the increasing seal and fisheries conflict.

## Seal-safe fishing gear – a sustainable solution

The most successful non-lethal mitigation method is seal-safe fishing gear. Passive fishing gears such as pots and traps are examples of seal-safe fishing gear where the catch can be protected in a solid compartment. Another way to minimize the conflict is to use fishing methods carried out during short time intervals.

### The pontoon trap

The Seals and Fisheries Program's most important progress has been the development of the seal-safe and sustainable trap-net for salmonids, called the pontoon trap. Pontoon traps have replaced traditional trap-nets and have thereby sustained a coastal fishery for salmonids in the northern Baltic Sea. Pontoon traps have also been developed for other species such as vendace and cod.

### The pot fisheries

With regards to gillnet fisheries for cod, the SFP lead the development of pot fisheries as an alternative to gillnets. Seal-safe pot designs are made easy to handle and are equipped with seal exclusion devices. Trials have shown that pots are selective and have comparable catch rates to gillnets.

### The seine net

During recent years the SFP has also developed a seine net for coastal fisheries as an alternative to gillnet fisheries for flat fish, whitefish and vendace. The studies on seine nets have shown promising results and commercial use of small-scale seines are soon to be expected.

*– Our work produces a scientific base for the support and the implementation of seal-safe fishing gears.*

