

THE WATER SPRAY GEAR

Facts up to and including 2020

Water spray gear

The water spray gear uses a technique by which water jets (spray) are used to startle flatfish from the seabed and causes them to swim into the fishing nets.

Beam

Water pump

Sole

The water spray gear is developed to catch the target species sole.

Water spray

Timeline

2017

At the end of 2017 fishing company Jaczon (Cornelis Vrolijk) started sketching a new sustainable fishing gear to target sole. Initially the design was successfully tested in a tow tank.

2018-2019

In 2018 a prototype of the water spray gear was developed. In 2019 this prototype was tested at sea on a small fishing vessel (cutter). During these trials the performance of the water spray gear was compared with a pulse gear.

2019-2021

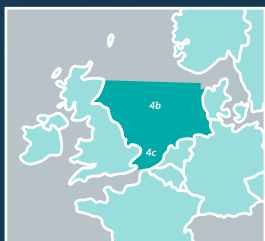
In 2019 funding was granted by the Dutch Ministry of Agriculture, Nature and Food Quality for further exploratory research. Within this project various setups of the water spray gear were tested during 30 fishing trips on board of the SCH63, a large cutter.

Research Water spray gear 2019-2021

During the exploratory research (2019-2021) various gear setups were tested. Among those setups variations in spray direction, water pressure and trawling speed were tested. During the trials comparisons were made between the catches of the starboard- and portside gear, where the effect on the catch of the modified side was compared with the unchanged other side. The catches were also compared with cutters which were fishing in the same area. Additionally cameras were attached to the gear to record the gear while fishing. Wageningen Marine Research (WMR) analyzes and reports the results for each trial. This data will be used for further optimization of the water spray gear.

Fishing areas 4b en 4c

The trials with the water spray gear were executed in the southern North Sea (ICES fishing areas 4b and 4c), the performance of the gear was in particular tested on known sole hot spots in 4c.



This project is a collaboration between Jaczon (Cornelis Vrolijk), Van Wijk, HFK, Padmos, Coöperatie Westvoorn, Wetec, WMR en Nederlandse Vissersbond. The research is for 65% subsidized by the Dutch Ministry of Agriculture, Nature and Food Quality.