

Ministry of Economic Affairs

Pulse Fishing

Pulse trawling as a promising alternative to beam trawling



Beam trawl

Beam trawling works by dragging tickler chains across the seabed to startle the fish and make them leap into the net. Tickler chains dig into the seabed, disturb the sediment and cause mortality of organisms in the trawl track.



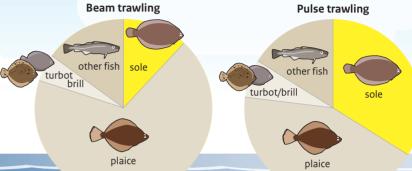
Pulse trawl

- · Improved selectivity of sole.
- Reduced fuel consumption.
- Reduction of discarded benthic fauna and undersized fish.
- Indication of higher survival of discarded sole and plaice.

Wing

Weak electric pulses make the fish leap into the net.

Composition of the catch (>MCRS)



Fuel consumption



> 300 hp cutters More than **50%** reduction



Discards benthic fauna

and undersized fish

- About **20%** reduction in the seafloor swept per fishing hour.
- Reduced penetration of the gear into the seafloor.

Pulse trawl effects

Multi-annual research program

- A 4 year research program has started in 2016 to study the size selectivity and the effects on environmental aspects, fish species and other marine organisms.
- An international steering group guides the research and the annual international stakeholder dialogue meetings.
- The ICES WGELECTRA is involved and the advice of ACOM has been accommodated in the research project.

Reference

Rijnsdorp A. et al., 2016. Pulse fishing and its effects on the marine ecosystem and fisheries. Wageningen University & Research Report C117/16.

Turenhout M.N.J. et al., 2016. Pulse fisheries in the Netherlands; Economic and spatial impact study. Wageningen, Wageningen Economic Research, Report 2016-104.

Van der Reijden et al., 2017. doi: 10.1093/icesjms/fsx019

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