

Zoetermeer, 13th of December 2017

Subject: Pulse fishing in the EU

Dear sir/madam,

We write you this letter in reaction to the narrative which has been part of the campaign BLOOM association started against pulse fishing in the EU. We would like to indicate our surprise about the arguments BLOOM association used in her communication. Additionally, we would like to put certain arguments in perspective by using extensive scientific knowledge which has been collected since the mid-2000. This research has been performed over a decade by multiple scientific organizations within Europe (such as ICES).

Innovations in fishing gear, such as the pulse technique which is mainly used in the flatfish fishery, means that (flat)fish can be caught using a more selective fishing method, which is more energy efficient (and therefor more cost effective) and has less impact on the seabed. The overall environmental impact of this fishery is far lower than the traditional fisheries on flatfish. Others NGO's (North Sea Foundation, Greenpeace NLD, Good Fish Foundation) have acknowledged the positive effects¹.

Pulse fishing explained

Pulse fishing is carried out with weak electric pulses which make the fish leap into the net. Because these pulses are so weak the fish is only stirred and not hurt or damaged, and certainly not killed. This technique is falsely referred to by BLOOM as electric fishing. Electric fishing uses high voltage electricity to kill fish and collect the dead fish from the surface of the water. This technique is not used in any European fishery, has never been used for flatfish and will never be used in Dutch fisheries as it is forbidden and not sustainable. Pulse fisheries is designed to mitigate the negative environmental effects of the traditional fishery on flatfish, and the results have been positive. The only statement BLOOM uses in its narrative which we can stand by is the fact that the use of pulse fishing can have a potential damaging effect on the spines of cod-like species. This however, only happens when specific circumstances are present (De Haan *et al.*, 2016).

As studies into pulse fisheries have shown promising results, all EU member states have been permitted to fish in the southern part of the North Sea since 2006, by using a temporary exemption for pulse fisheries. Contrary to what BLOOM insinuates, there is no case of illegal permits since The Netherlands made use of three derogations foreseen in the EU-Regulation:

- a. 5% of the fleet concerned may make use of pulse fishing (R 850/1998, art. 31a). This accounts for 22 vessels;
- b. Another 20 vessels are the result of a derogation to stimulate research in R. 850/1998, art. 43;
- c. 42 vessels come forward from a derogation, to facilitate the implementation of the Landing Obligation, in R. 1380/2013, art. 14.

In total a maximum of 84 Dutch vessels are allowed to carry out pulse fishing, during an experimental phase which lasts until 2019. Pulse fishing is not without obligations. In order to be eligible for a pulse fishing license the vessels are obliged to carry out research for the data collection program of the Dutch flatfish

¹ <https://www.noordzee.nl/opinie-maak-nu-echt-werk-van-onderzoek-pulsvisserij/> (Dutch)

fishery.² Every vessel of the pulse fishing fleet has to record and collect haul by haul data analysing commercial catches, which in combination with collection of historical data will be used to analyse spatial and temporal selectivity and the catch efficiency.

A lot of research on the effects of pulse fishing has been executed before 2016. When pulse fishing is compared to beam trawling, pulse fishing shows a reduction of the discards of benthic fauna and undersized fish of 50%. Additionally, pulse fishing results in a 20% reduction of seafloor swept per fishing hour and a reduced penetration of the gear in the seabed (Rijnsdorp *et al.*, 2016; Rijnsdorp *et al.*, 2017). The reduction of discards and seafloor swept per fishing hour together with the reduced penetration of the gear in the seabed shows a substantial reduction in fuel consumption by nearly 50%, thereby substantially reducing the carbon footprint (Turenhout *et al.*, 2016). Furthermore, pulse fishing shows a higher selectivity for sole and higher survival rates of discarded plaice (van der Reijden *et al.*, 2017). These results are summarized in the infographic from the Dutch Ministry of Agriculture, Nature and Food Quality sent earlier this year (Infographic, 2017). Additionally, due to shorter fishing trips and not using heavy tickler chains, fish from pulse vessels are high in quality.

Stock management

Nearly 60% of the stocks of the North East Atlantic and most of the target species in the North Sea area are fished on the level of maximum sustainable yield (MSY; Commission, 2017). The sole stock, the target species for the pulse fishery, is one of the stocks fished at MSY. Pulse fishing is more selective than the traditional beam trawl fisheries and therefore has a positive effect on stock management which will result in a larger spawning stock biomass.

Additional research

In 2016 a four year research program on the long term impact of pulse fishing on the marine ecosystem and marine organisms started³. In the same year an *International Scientific Advisory Committee on Pulse Fishing* has been established in order to:

1. Provide advice on the objectives and workplan of the Pulse trawl working program;
2. Provide feedback to the research teams and have oversight of the interlinkages between the different research projects carried out;
3. Provide advise on how the results can be presented to be applicable in the context of the societal debate and decision making processes.

Conclusion

Taking all the arguments mentioned above into account we can only conclude that:

1. Extensive scientific research shows that pulse fishing has a positive influence on all fields that have been studied;
2. Pulse fishing is a legal catching method as long as permits are granted;
3. There is a long term research program available that will be supported by an International Scientific Advisory Committee on Pulse Fishing.

² In the exemptions granted by the Ministry of Agriculture, Nature and Food Quality the obligation to carry out research for the data collection program of the Dutch flatfish fishery is mentioned.

³ A summary of the research program can be found on <https://pulsefishing.eu/en/research-articles/summary-research-project-impact-assessment-pulse-fishing/summary>



Dutch Federation of Fish
Wholesalers and Processors

Overall we conclude that fishery products that have been obtained by fishing with the pulse technique are ecofriendly, selective and help reduce the carbon footprint. This means that fishery products obtained from pulse fisheries are perfectly safe to put on the shelf in the supermarket.

We hope that this letter will help you to gain perspective and increase your understanding of the background of pulse fishing, thereby creating a more balanced and positive view on this innovative fishing technique. If the above is unclear or if there are any questions, please don't hesitate to contact the secretariat on: secretariaat@visfederatie.nl, or call +31(0)79-3030310.

Kind regards,

G. Pastoor
President

References

De Haan et al. (2016) *Pulse trawl fishing: characteristics of the electrical stimulation and the effect on behaviour and injuries of Atlantic cod (Gadus morhua)*. – ICES Journal of Marine Science, doi: 10.1093/icesjms/fsw018.

https://pulsefishing.eu/sites/default/files/pf_research/paper/icesjms.fsw018.full_1.pdf

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

https://pulsefishing.eu/sites/default/files/pf_research/paper/C117.16%20Report%20Pulse%20fishing%20and%20effects%20-%20A.%20Rijnsdorp%20et%20al-bc-17Jan17.pdf

Rijnsdorp et al. (2017). *Assessing and mitigating impact of bottom trawling*. European FP7 Benthic Ecosystem Fisheries Impact Study - final Report.

https://www.benthis.eu/upload_mm/e/a/b/0af9c831-c03d-4f85-a53c-e99e0b8ead0a_BENTHIS_FinalReport_29Nov2017.pdf

Van der Reijden et al. (2017). *Survival of undersized plaice (Pleuronectes platessa), sole (Solea solea), and dab (Limanda limanda) in North Sea pulsetrawl fisheries*. ICES Journal of Marine Science, Volume 74, Issue 6, 1 July 2017, Pages 1672–1680.

<https://doi.org/10.1093/icesjms/fsx019>

Turenhout et al. (2016). *Pulse fisheries in the Netherlands; Economic and spatial impact study*. Wageningen, Wageningen Economic Research, Report 2016-104.

https://pulsefishing.eu/sites/default/files/pf_research/paper/Pulse%20fisheries%20in%20the%20Netherlands%202016_0.pdf

Infographic (2017). *Pulse Fishing Infographic*.

https://pulsefishing.eu/sites/default/files/pf_research/paper/Infographic%20Pulse%20Fishing-DEF.pdf

Commission (2017). *COMMUNICATION FROM THE COMMISSION on the State of Play of the Common Fisheries Policy and Consultation on the Fishing Opportunities for 2018*. COM/2017/0368 final

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2017:368:FIN>