

The time to research electric pulse fishing is now

In November the European Parliament will vote on the future of innovations in fishing methods. One of the most controversial subjects at stake is electric pulse fishing in the Netherlands. The European Council of Ministers intend to put the brakes on this new fishing method, to the dismay of the Dutch government and fishing industry, who have actively promoted this technique in recent years. The Netherlands are the dominant member state employing the pulse fishing technology; it was developed here, and 84 Dutch fishing vessels hold temporary licenses. Technically-speaking, these licenses constitute exemptions from the ban on electric fishing granted on the premise of scientific research. The current regulation allows up to 5% of a Member State's beam trawlers to be equipped with pulse gear. Due to an intensive pro-pulse policy in the Netherlands, the number of temporary licenses has increased to almost one third of the demersal fishing fleet over the years. The number of exemptions granted, however, is not based on a scientific rationale. Rather, scientific research was used as a guise by the pro-pulse lobby to increase the number of exemptions accorded over the years. The upcoming vote might result in withdrawal of the majority of the licenses, an outcome which would have a major impact on the Dutch fishing industry. The fishing industry is now doing everything in its power to keep the licenses in place. In this article, the Dutch environmental NGOs Greenpeace NL, Good Fish Foundation, the Dutch Elasmobranch Society and the North Sea Foundation share their view on the subject.

Sustainable fishing and innovation

We agree that the Dutch government has been reckless in its persistent pursuit of pulse licenses. Nevertheless, the fisheries sector should not be punished for developing and implementing innovations; this would be throwing the baby out with the bath water. Increasing the sustainability of the fishing industry is as necessary as it is complex. In the coming years innovation will be paramount to developing fishing techniques that minimise ecosystem damage while simultaneously being profitable for fishermen. Electric pulse fishing is a potentially interesting and innovative method, but at present it is the subject of considerable wrangling in European politics.

Pulse fishing: what do we know?

Pulse fishing is a technique where wires emitting electrical pulses are attached to a trawl net, which is dragged over the seabed. It is used to catch flatfish, and particularly effective in catching sole. Fish that are agitated by these pulses jump up from the seabed and are caught in the fishing net. One of the potential advantages of pulse is its relatively low physical disturbance of the seabed in comparison with conventional techniques. In addition, the lighter fishing gear results in reduced fuel consumption; a benefit for the fishermen as well as the climate. Finally, there are indications that pulse fishing could be more selective in the fish it catches, potentially leading to a reduction of the huge amount of unwanted by-catch in flatfish fisheries.

In principle, all electric fishing is prohibited in the EU. Intuitively, the combination of water and electricity does seem rather dangerous. Pulse fishing, however, occurs with low voltage and ought not to be compared with high voltage underwater electric shocks. Nevertheless, many questions about the risks of pulse remain unanswered. Long-term exposure to low levels of electricity could change the chemical composition of the seabed, affecting life on and around the sea floor. Many marine species are sensitive to electricity: sharks and rays use it to hunt for food; their response to pulse fishing is not yet understood. Another risk is that areas that were previously left untouched can be reached more easily because the gear is lighter. To answer the remaining questions an extensive scientific research programme has been launched, but the results are not expected before 2019.

What is the next step?

Pulse fishing could potentially have a valuable role to play in the transition to sustainable fishing in the North Sea. However, before pulse can be claimed as a sustainable technique, the true risks of pulse fishing for the marine environment must be made clear once and for all. Innovative fishing methods should only be allowed if they have less ecological impact than existing techniques. Whether or not this is the case should be determined by independent scientific research. Only under this condition can the 84 Dutch exemptions be converted into permanent fishing licenses. If the opposite turns out to be true, the licenses should be withdrawn. The discussion about pulse fishing has gone on for almost 10 years now; that's enough for everyone involved. We should focus on the scientific research into pulse fishing and finally get clarity on the key questions outlined in this article. Therefore, we call on the Dutch government to ensure that the current research effort will provide the answers we have been waiting for almost a decade.

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