

## "I spy with my little eye...a floundering flatfish": can self-sampling by fishers facilitate the implementation of the discard ban?

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With the reformed Common Fisheries Policy more than ever before it is important to know what commercial fishers catch at-sea, as opposed to what is landed ashore. Assessments of the condition of captured fish will be equally important for granting exemptions from the landing obligation or discard ban on the basis of 'high survival'. To meet these data needs, fisheries-dependent observations are needed on large spatial and temporal scales. Traditional techniques of observer monitoring may not suffice and the utility of alternatives such as self-sampling and electronic monitoring need to be explored. Practicality of collection and validation of data are key challenges. Using a case study where the ability of different observers to accurately score presence/absence of neuro-muscular reflex impairment and physical injury was compared, we illustrate how to control bias and improve data reliability. The Reflex Action Mortality Predictor (RAMP) method is a proven concept that has been validated in predicting vitality and mortality in a variety of taxa. It may be a promising technique to reliably predict survival of discarded fish without actually tracing its fate. For making predictions about survival on a fleet-wide scale, considerable numbers of fish caught across the full spectrum of possible fishing conditions, will need to be assessed. Integrating self-sampling, observer and electronic monitoring techniques in the collection of such and other data, and tying their quality to an incentivebased system of levies or auction sales may be the way forward for a 'future fleet'.

## Dilemma's in studying behavior of fishermen in the context of contested fisheries policy Marloes Kraan IMARES Wageningen UR

Since the implementation process of the landing obligation (LO) started in 2013, the Dutch fishing fleet is undertaking numerous research projects to prepare for what is coming. The LO forbids the discarding of undersized quota species. This is a radical change of policy, as the landing of undersized fish had always been forbidden. The measure, aiming to end 'wasteful practices' is contested. It is expected to have big implications for the Dutch demersal fishing fleet as discard percentages have been quite high. Research is needed to foresee how the fleet can respond to the new policy. The research is subsidized via a scheme of the Dutch government. The fleet representatives have regular meetings with the government to discuss the progress of the projects. During these meetings, where also research institutes and NGO's are present, the preparatory actions the government undertakes at the EU level are also discussed; as well as feedback is given of the NSAC discussions. The government and the fisher representatives are cooperating in the implementation. This cooperation, however is under continuous tension. There are two important reasons for this. First of all because the fishing fleet is so against the LO, that they are very reluctant to participate in the implementation of the measure. Secondly because the influence of the Dutch government is limited, as the implementation of the LO is steered at the regional and international level. One of the research projects aims to investigate in what way fishermen can fish more selectively by changing their fishing behavior. It aims to understand the way in which fishermen currently choose where and how to fish, and to understand their room to maneuver to catch less undersized fish. This paper discusses the methodological, ethical and knowledge dilemma's surrounding this research project.