**High survival exemption for plaice caught by TR2 vessels using Trammel Nets in ICES areas VIId and VIIe**

*Request under Article 15.4(b) of Regulation (EU) 1380/2013 to exempt from the landing obligation plaice caught by trammel nets in ICES areas VIId and VIIe.*

# Summary

Article 15.4(b) of Regulation (EU) 1380/2013 on the Common Fisheries Policy states that the landing obligation shall not apply to:

“species for which scientific evidence demonstrates high survival rates, taking into account the characteristics of the gear, of the fishing practises and of the ecosystem;”

In response to industry’s view that Plaice has a high rate of survival, the Centre for Environment, Fisheries and Aquaculture Science (Cefas) was commissioned to carry out a number studies on high survivability of Plaice. This study was undertaken by Cefas in the Eastern Channel trammel net fishery

The North Western Waters regional group notes that scientific evidence demonstrates a survivability rate of 73% for plaice (Pleuronectes platessa) caught by TR2 vessels using trammel nets in area VIIe and recommends that catches of Plaice caught in areas VIId and VIIe should be exempt from the landing obligation on grounds of high survival rates, as provided for by Article 15.4(b) Regulation (EU) 1380/2013. This will reduce the risk of vessels being prevented from continuing to fish at sea due to their low Plaice quota.

# Key Information

Exemption target: Plaice (Pleuronectes platessa)

Exemption grounds: High survivability.

Survivability rates: 73%

Vessels affected: 87

Discard rate: 32%

2018 UK TAC: 3,014

# Fishery

In 2017, 87 vessels registered in the UK caught plaice with Trammel Nets in area VIId and VIIe, with a total catch of 62 tonnes. The discard rate for the stock in area VIId and VIIe is currently at 32%. An estimated 19.8 tonnes will be discarded in 2018. The survival rate in the study is 64%, which would indicate that around 14.3 tonnes of the discarded Plaice will survive.

# Study

The vessel used in this study was 9.8m in length, with a width of 3.8m, a draught of 1.8m and powered by a 147 horsepower diesel engine. The vessel operated out of Sovereign Harbour, near Eastbourne, fishing the Eastern Channel (see Figure 1). Plaice are caught as a bycatch species, mostly during targeted sole fishing.

For this study fishing took place in the Pevensey Bay area of ICES Division VIId, with a fishing day lasting about 8 hours.





**Figure 1. The locations of the hauls observed in this study (Case 4) on plaice high survival in trammel nets.**

Data collection

All plaice caught were recorded by length. Each individual fish was measured and scored using a predefined assessment protocol developed methods described in the ICES WKMEDS 2014 report and refined in the Cefas laboratory using aquarium kept plaice. Vitality was assess using a semi-quantitative assessment of activity and a quantitative reflex and injury scoring method.

Vitality assessment

A total of 1004 plaice were caught. Fish were held in captivity for 168-342h. Table 1 sets out the vitality assessment of the plaice catch, and its relevant high survival probability.

Table 1: Survivability and catch profile of study by vitality assessment for plaice.

|  |  |  |
| --- | --- | --- |
| **Vitality assessment** | **Proportion of fish at each vitality**  | **Survivability probability (%)** |
| Excellent | 0.68 | 80.3 |
| Good | 0.29 | 71 |
| Poor | 0.10 | - |
| Moribund | 0.20 | - |

**N.B. No plaice were categorised as Dead. Insufficient catches of Poor and Moribund plaice to investigate high survivability.**



**Figure 2. Length frequencies of plaice in trammel net catches and held for observation**

Results

From the extension models used in the study, because the rate of mortality had reduced within the observation time, the forecast survival estimate was comparable at 71.1-71.9%

The study identified a number of potential stressors on the captive fish associated with the methodology in this study, which are likely to have resulted in experimental induced mortality and therefore underestimated survival. Specifically these stressors included:

* Handling fish to conduct the vitality assessments, length measurements and to put fish into the on-board tanks
* Captivity in the on-board tanks (movement caused by vessel movement; proximity with other fish; serial flow of water from top to bottom tank)
* Stopping water flow to on-board tanks on approach to port until docked (reducing dO2)
* Transfer of fish into tubs (handling of fish)
* Carrying tubs off the vessel and transporting, by van, to onshore holding tanks (increased temperature, reduced dO2, movement)
* Handling the fish to transfer into onshore tanks
* Adjusting to salinity and temperature
* Monitoring captive fish using tail grab

# Conclusion

The UK believes that the fishing practices in this study resulting in survival rates of 72% for bycatches of Plaice are representative of general fishing practices by the vessels using trammel nets in ICES areas VIId & VIIe.

On this basis we would like to request a high survival exemption for plaice caught by trammel nets in ICES Areas VIId & VIIe.

**Table 5: Completed STECF table for high survivability proposal**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Exemption applied for (species, area, gear type)** | **Species as bycatch or target** | **Number of vessels subject to the landing obligation**  | **Landings (by landing obligation subject vessels)** | **Estimated Discards** | **Estimated Catch** | **Discard Rate** | **Estimated discard survival rate from provided studies** |
| UK | Plaice Area VIId and VIIeTR2 vessels using Trammel nets | By catch  | 87 | 62t | 33.3t | 104.16t | 32% | 73% |