

# using a quad-rig trawl to improve selection in a *Nephrops* fishery

## AIM

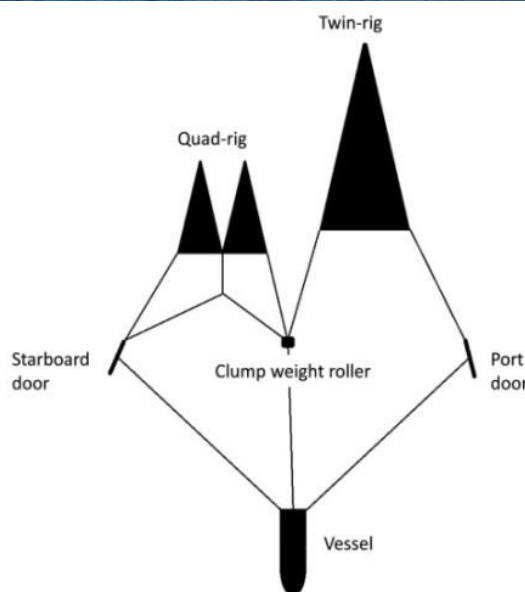
To compare catches of *Nephrops* and fish in twin and quad-rigged *Nephrops* trawls

## TARGET SPECIES

*Nephrops*

## AREA, VESSEL

30 catch comparison hauls, using a hybrid twin/quad-rig, took place in the Celtic Sea (ICES VIIg) on board MFV Celtic Chieftain (DA2) (22.4m, 431kW) during April 2014.



## GEAR MODIFICATION

Half a twin-rig and half a quad-rig were towed side by side.

Nominal fishing circle for the quad and twin-rig trawls was 380 x 80mm and 650 x 80mm respectively.

Nominal mesh size was 70mm throughout and a 110mm square mesh panel was fitted between 9 and 12m from the codline in all gears.

Species	Twin-rig (kg)	Quad-rig (kg)	Difference (%)
Tailed <i>Nephrops</i>	90	185	106
Whole <i>Nephrops</i>	379	537	48
Cod	137	53	-61
Haddock	428	266	-38
Whiting	259	252	-3

## RESULTS

In the quad-rig there were increased catches of *Nephrops* of all sizes. Increased catches of small *Nephrops* and small cod.

Reduced catches of large cod and haddock of all sizes.

The results demonstrate improved species selectivity but also a need to improve size selectivity in the quad-rig.

## FURTHER INFORMATION

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