

Selective gear development in the Northern Ireland nephrops fleet, 2019 - 2020



seafish

afbi AGRI-FOOD
& BIOSCIENCES
INSTITUTE



nifpo
NORTHERN IRELAND
Fish Producers' Organisation

Department of
Agriculture, Environment
and Rural Affairs



Overview

- 6Year Industry led project
- Collaborative with DAERA, AFBI & Seafish
- Commenced February 2017, funded up to December 2022
- EMFF Funded
- Emphasis on industry engagement – The PO network

Northern Ireland harbours and gear trials area



Aims

Design



Trial



Implement



More
selective
fishing
gears



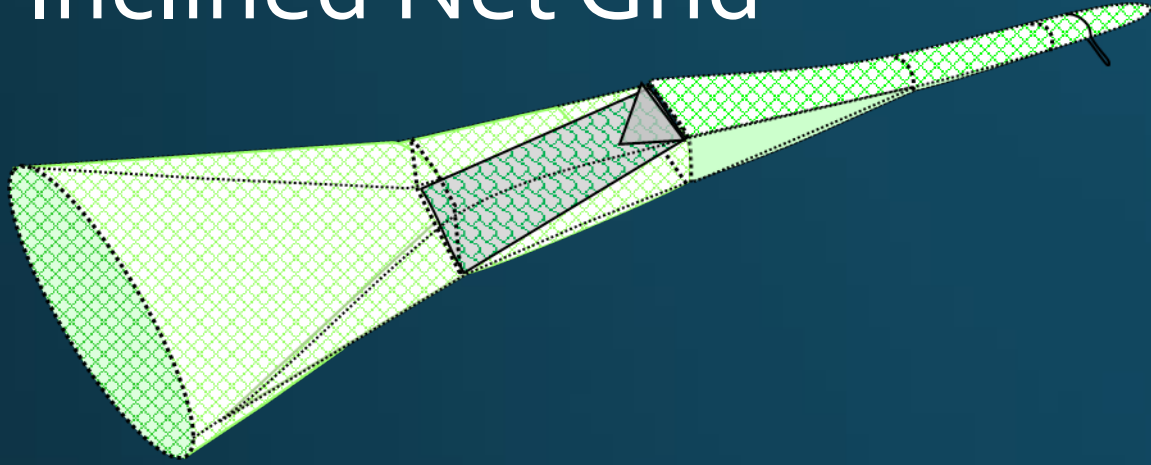
Full implementation
of the Landing
Obligation, January
2019

- Reduce unwanted by-catch of quota species
- Avoid the catching of juvenile fish species
- Retain commercially valuable target species

List of Gear Trials carried out in 2019-2020

- Inclined Net Grid vs 300mm SMP (Twin rig >12m)
- Inclined Net Grid vs 200mm SMP (Single rig <12m)
- Large pelagic mesh size in cover vs 160mm diamond cover (Twin rig >12m)
- Coverless trawls vs set of SELTRA270s (Twin rig >12m X2)
- Green lights fitted to bottom panel of SELTRA270 vs unilluminated SELTRA270
(Twin rig >12m)
- Luminous netting in bottom panel of SELTRA270 vs unilluminated SELTRA270
(Twin rig >12m)

Inclined Net Grid



Trial Date	Inclined Net Grid Version	Species	Catch rate difference compared to control
August 2018	200mm	Whiting	-48%
		Nephrops	-16%
	400mm	Whiting	-30%
		Nephrops	-7.8%
June 2019	400mm	Whiting	+9%
		Nephrops	-36%
September 2019	400mm	Whiting	-68%
		Nephrops	-42%
March 2020	400mm	Whiting	-58%
		Nephrops	-30%
September 2020	400mm	Whiting	-66%
		Nephrops	+9%



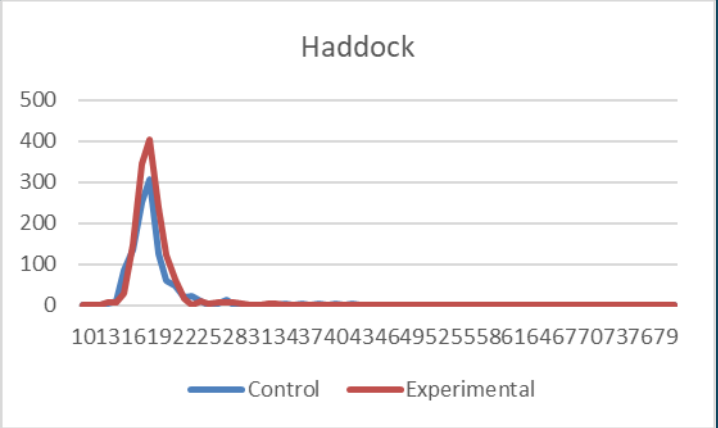
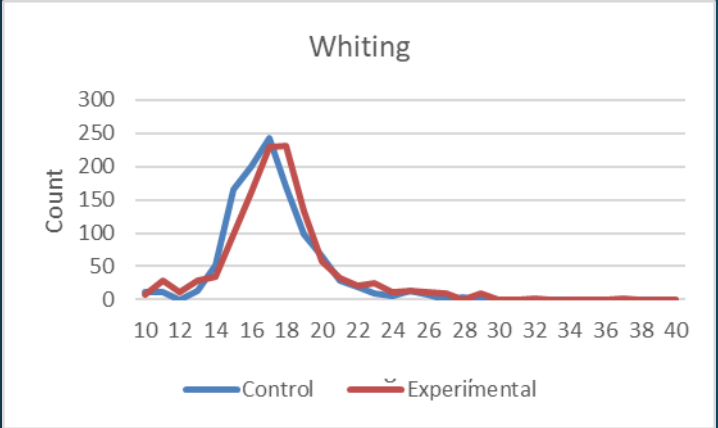
2017-2018
200mm
version



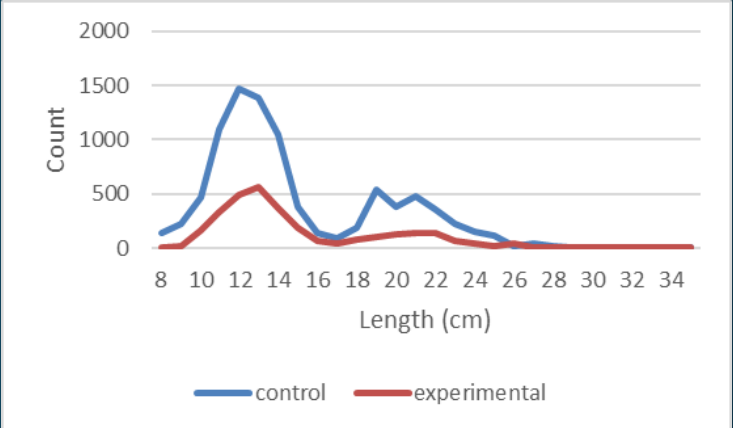
2019-2020
400mm
version

Inclined Net Grid

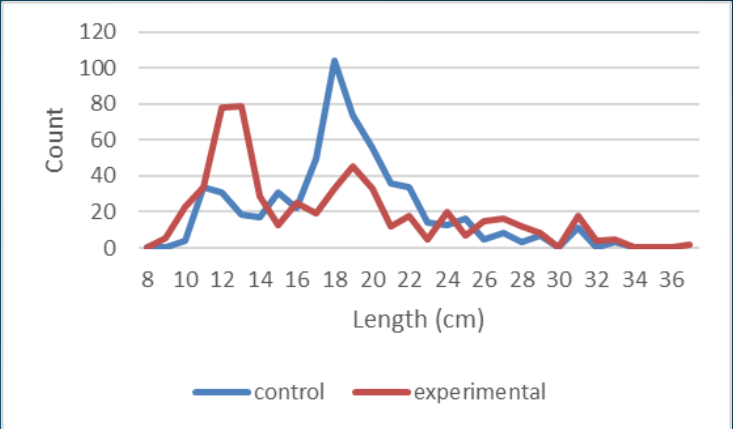
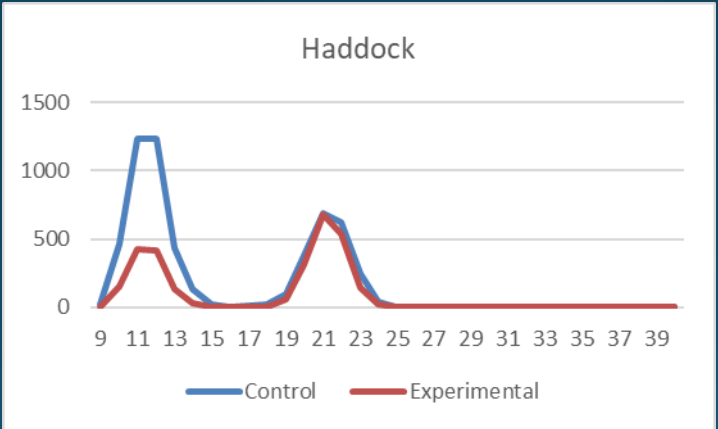
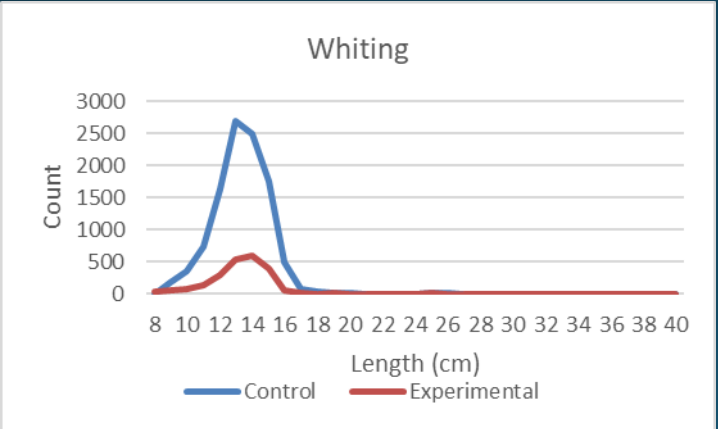
June
2019



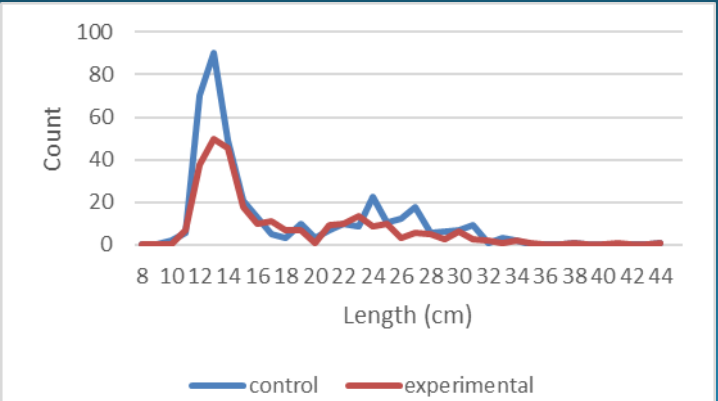
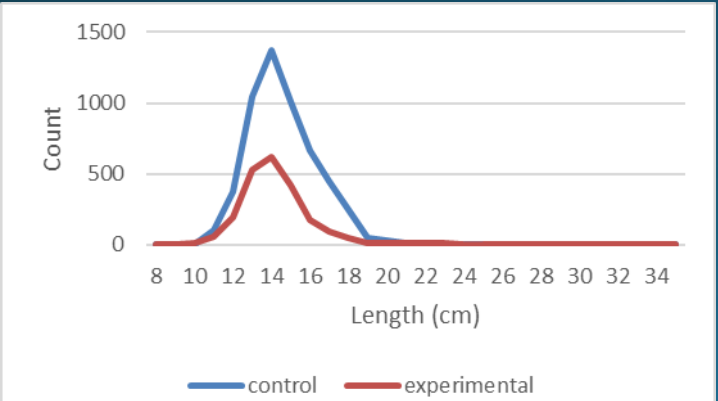
September 2021



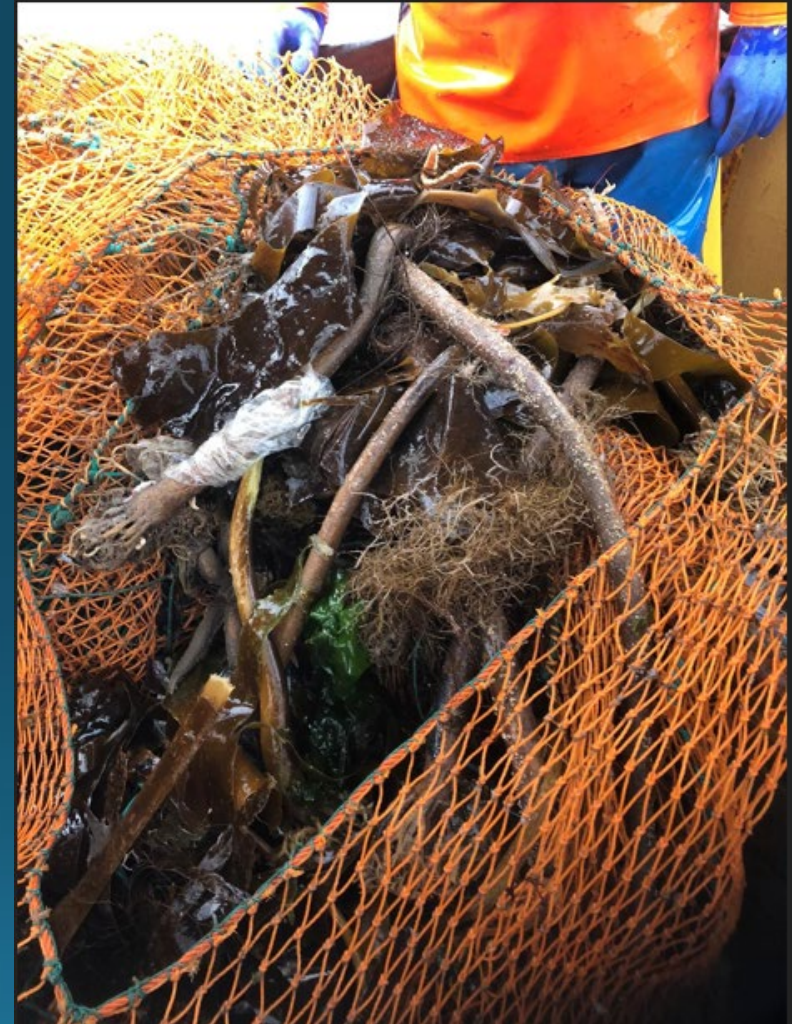
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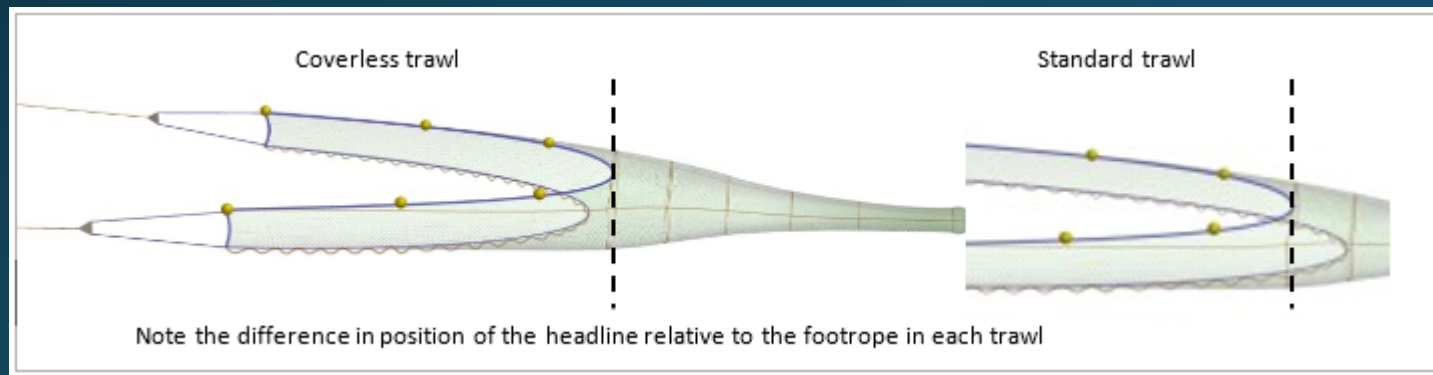
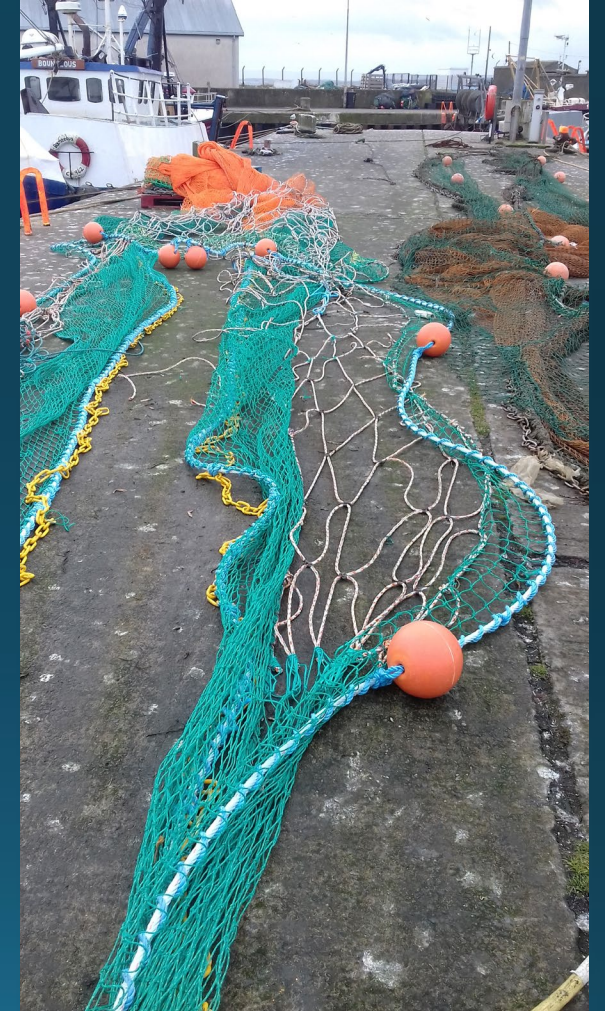
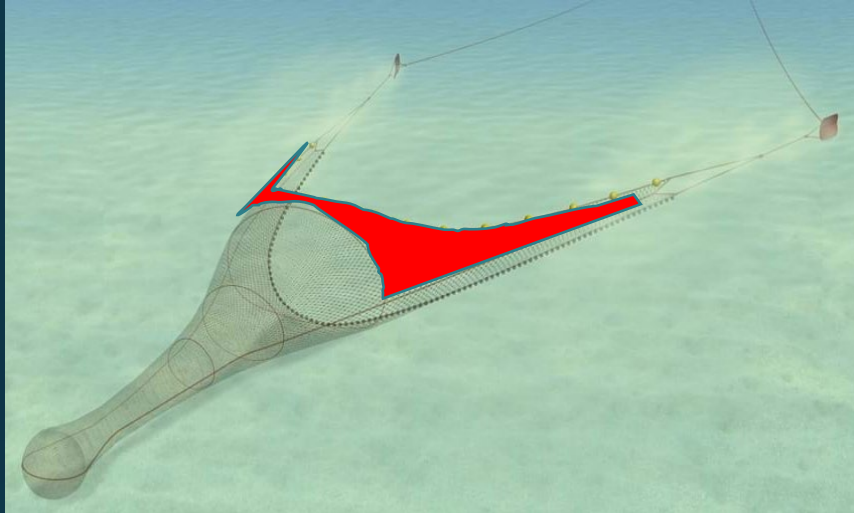
March
2021



Inclined Net Grid - Limitations

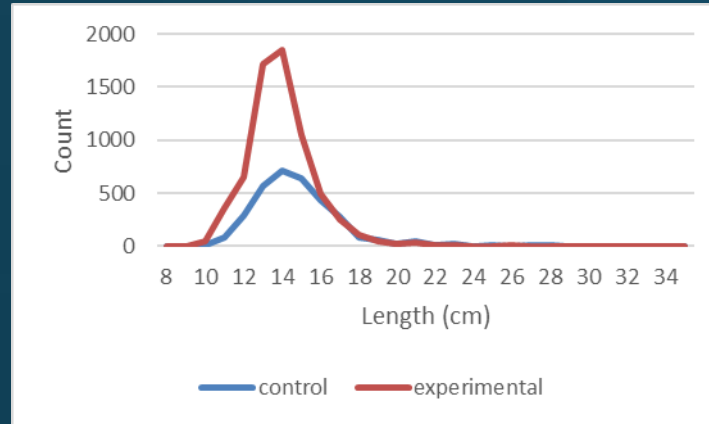


Pelagic sized mesh in cover & Coverless trawls

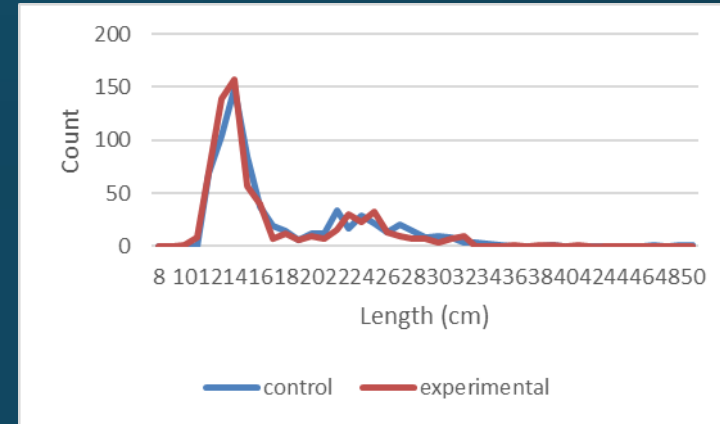


Pelagic sized mesh in cover & Coverless trawls

Pelagic mesh cover

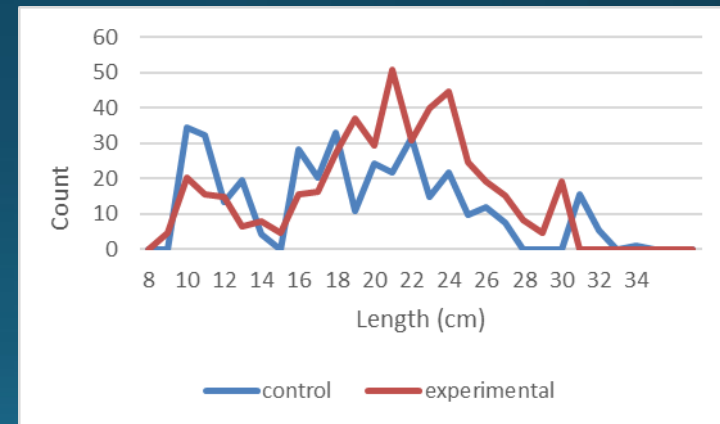
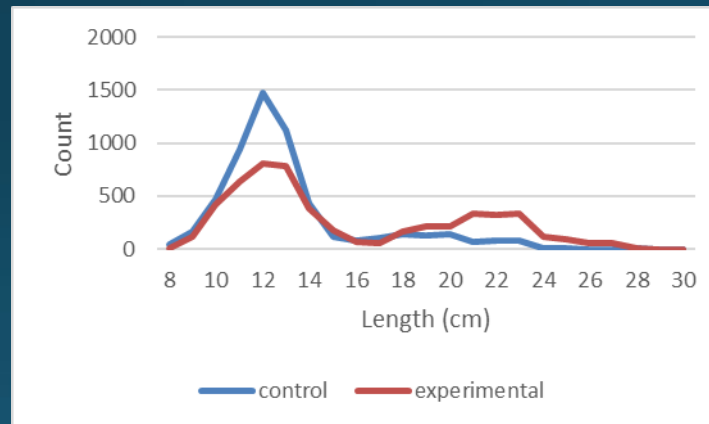


Whiting

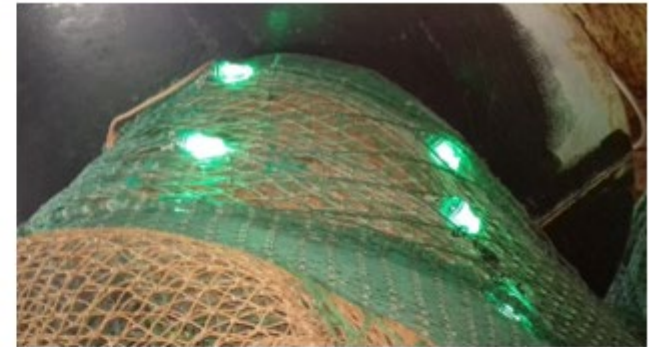
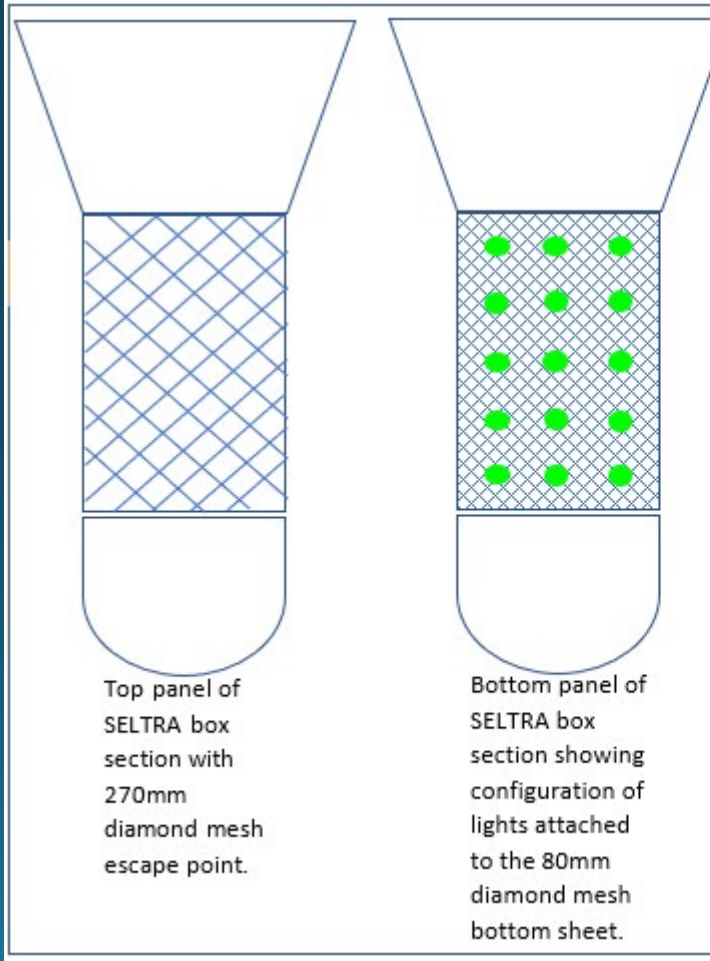
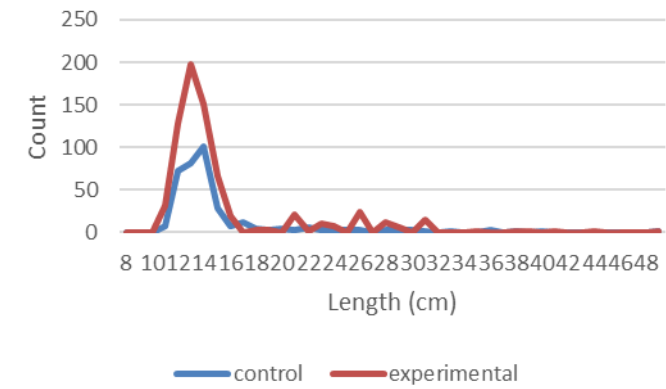
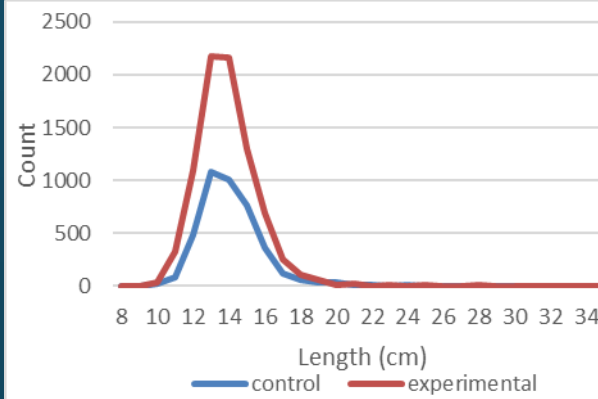
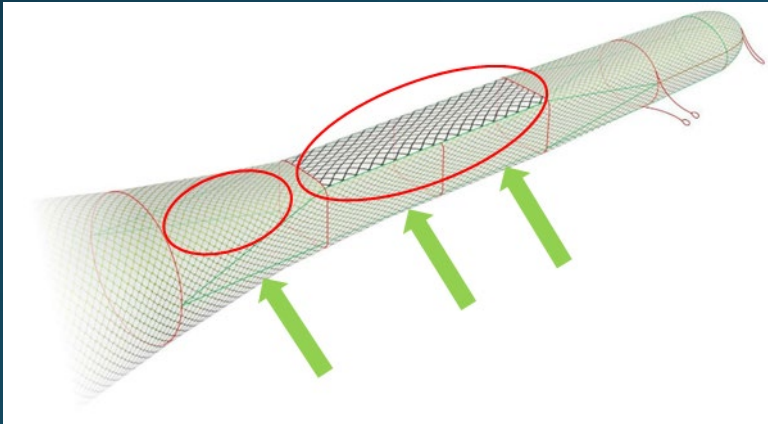


Haddock

Coverless trawls



Lights & luminous netting



Thank you for listening

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Northern Ireland Gear Trialling project 2017-2022

The logo for Seafish, featuring the word 'seafish' in a blue sans-serif font with a stylized blue fish icon above the 'i'.The logo for the Agri-Food & Biosciences Institute (AFBI), with 'afbi' in a large teal font and 'AGRI-FOOD & BIOSCIENCES INSTITUTE' in a smaller black font to the right.