

# Fisheries at Marine Scotland Science



The Scottish  
Government

NESFDP Meeting, Woodhill House, Aberdeen  
24 March 2023

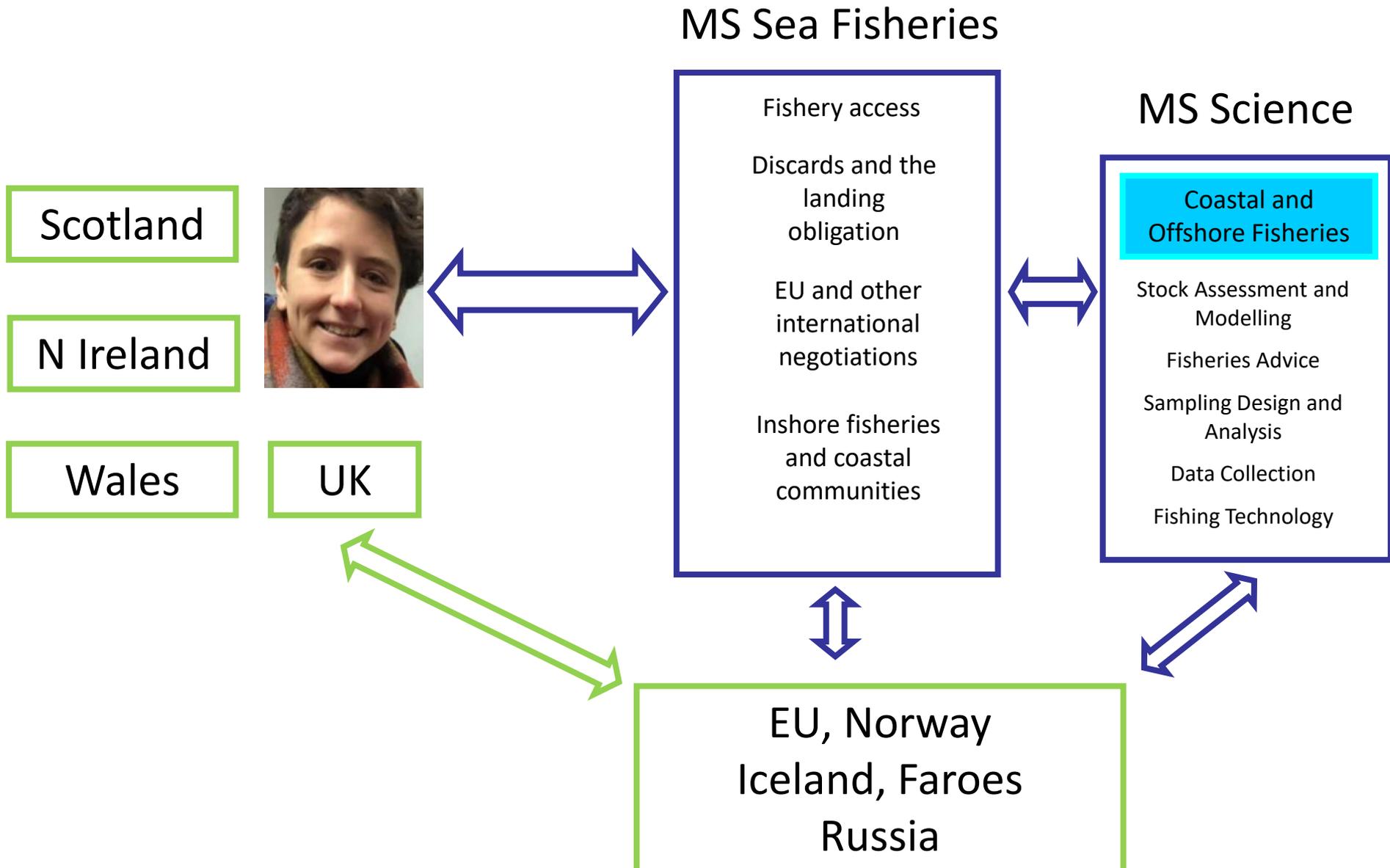
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# Fisheries at Marine Scotland Science

- Currently two main Programmes:
  - Fisheries Assessment and Advice (FAA)
  - Fisheries Data Programme (FD)
- Objective:
  - To provide **innovative science** and **sound advice** to managers and stakeholders which leads to **sustainable sea fisheries** and enhances the potential for **economic growth**.



# Context of research and advice



# Key commercial species

(2020 value of landings by Scottish-registered vessels)

## Pelagic



Herring (£26m)



Mackerel (£175m)



Nephrops (£47m)



Scallops (£28m)



Crab (£14m)

## Shellfish



Lobster (£14m)



Squid (£8m)



Cod (£24m)



Haddock (£33m)



Whiting (£13m)



Monkfish (£30m)



Saithe (£8m)



Hake (£9m)



Megrim (£9m)



Ling (£6m)

## Demersal

# Key commercial fleets (2020)

## Pelagic



22 vessels  
Average 60 m

## Whitefish



132 vessels  
Average 23 m

## Mixed Whitefish and Nephrops



358 vessels  
Average 14 m

## Inshore

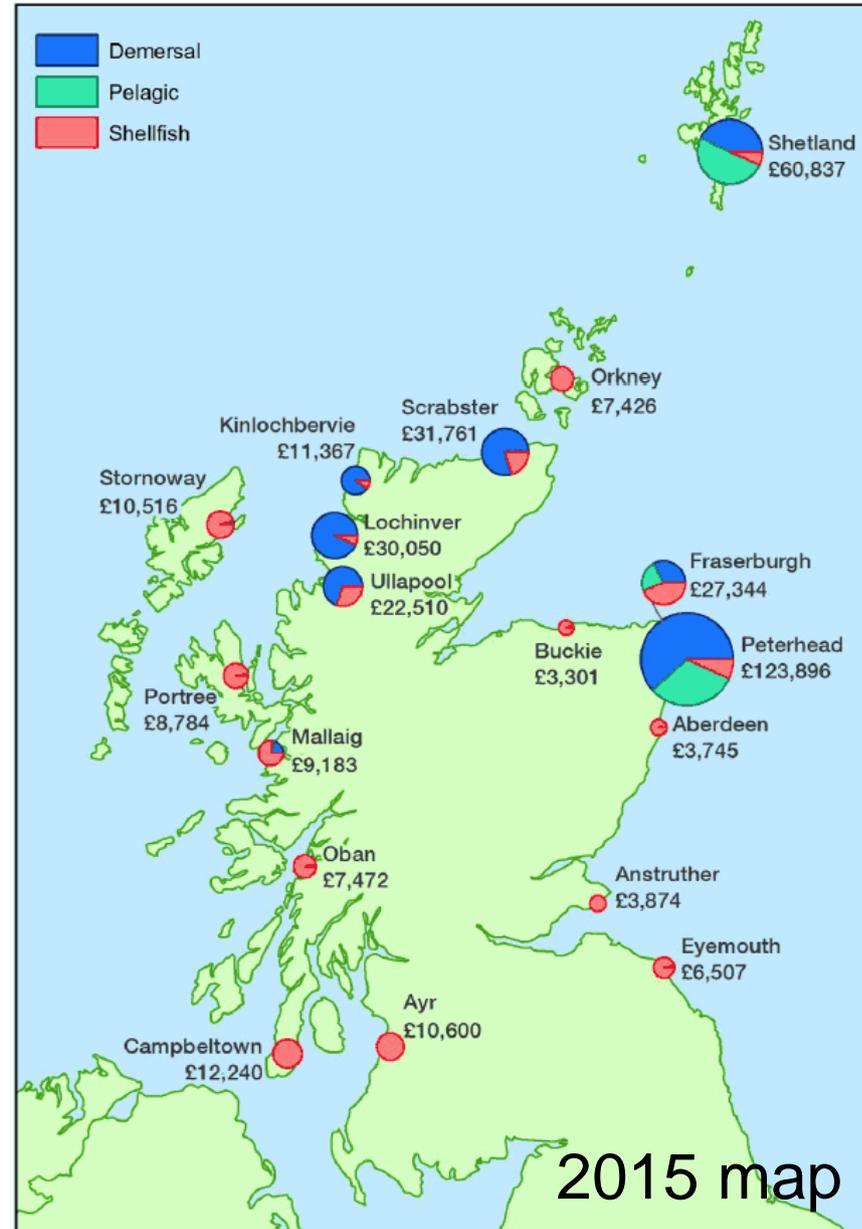


1561 vessels  
Less than 10 m

# Commercial fisheries



2020 landings:  
389000 t  
£483 million



# Coastal and Offshore Fisheries Network



**Coby Needle**

- Chief Fisheries Advisor for Scotland
- Fisheries Assessment and Advice Programme Manager



**Matt Gubbins**

- UK delegate to ICES Council
- Fisheries Data Programme Manager

## Fisheries Assessment and Advice Programme

- Stock Assessment and Modelling Group
- Fisheries Advice Group

## Fisheries Data Programme

- Fisheries Statistics Group
- Data Collection Group
- Fishing Technology Group

# MSS fisheries: what we do

## Sampling

Ports and markets

Demersal surveys

Acoustic surveys

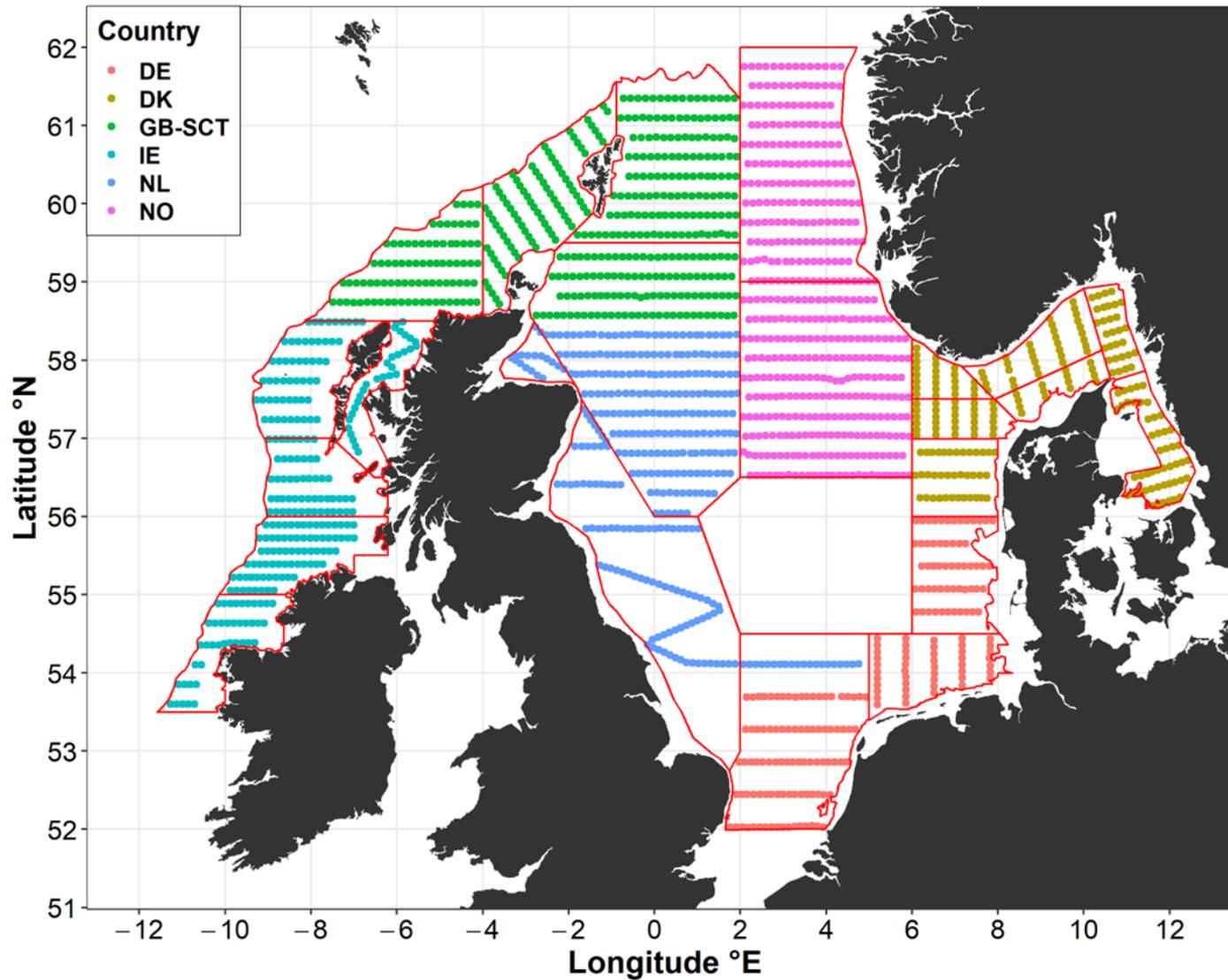
Mackerel egg  
surveys

*Nephrops* TV  
surveys

Observers

CCTV

# Example: Herring Acoustic Survey 2022



HERAS tracks by different countries

# Example: CCTV automated image analysis

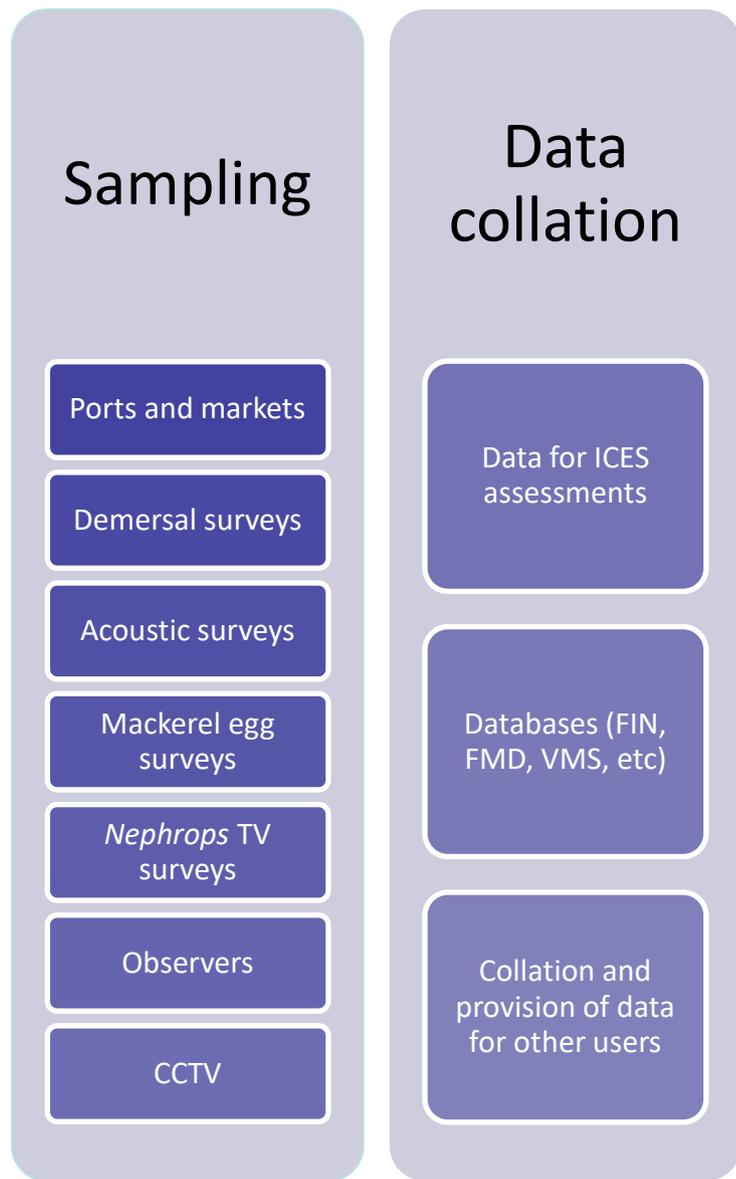


Fish identified and separated

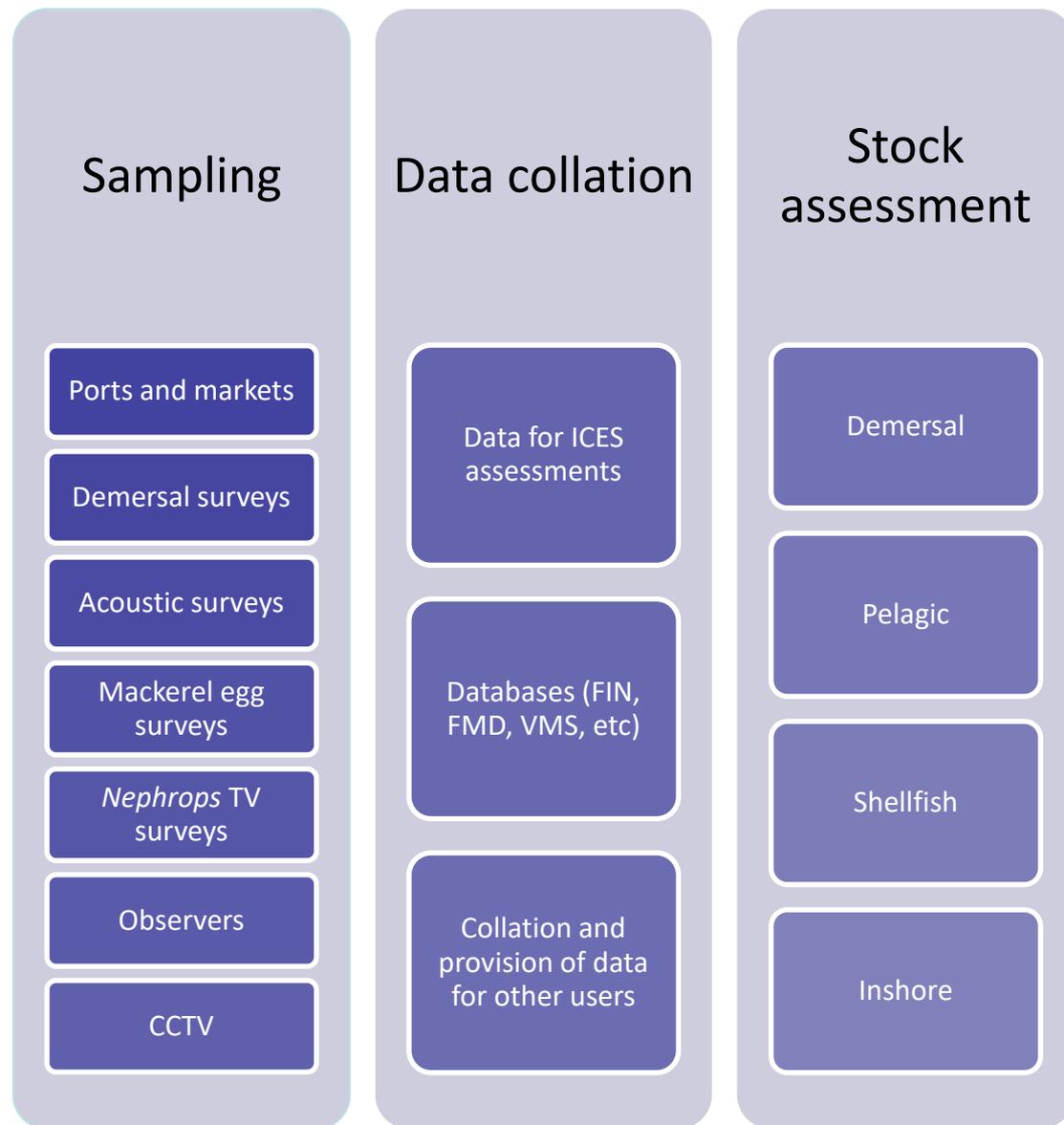


Fish distinguished from background

# MSS fisheries: what we do



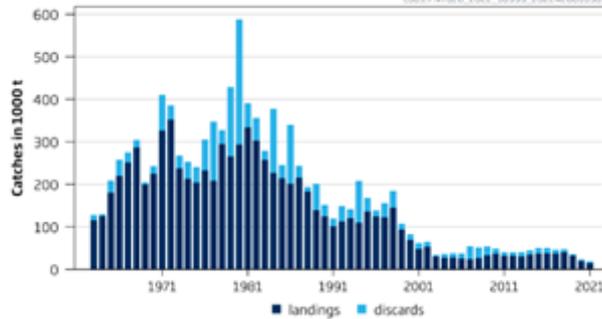
# MSS fisheries: what we do



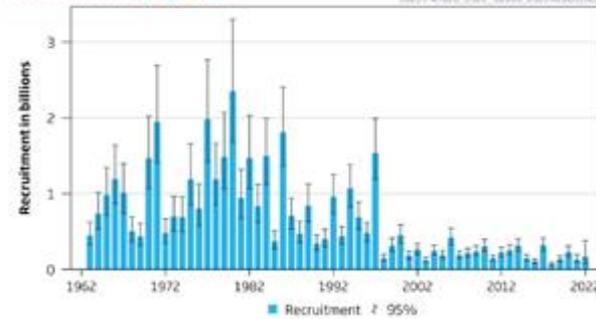
# Stock assessment

2022 North Sea  
cod assessment

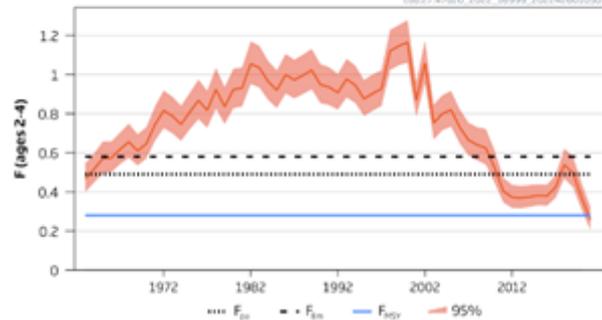
Catches



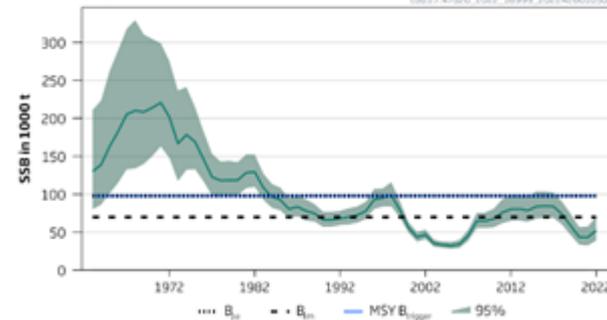
Recruitment (age 1)



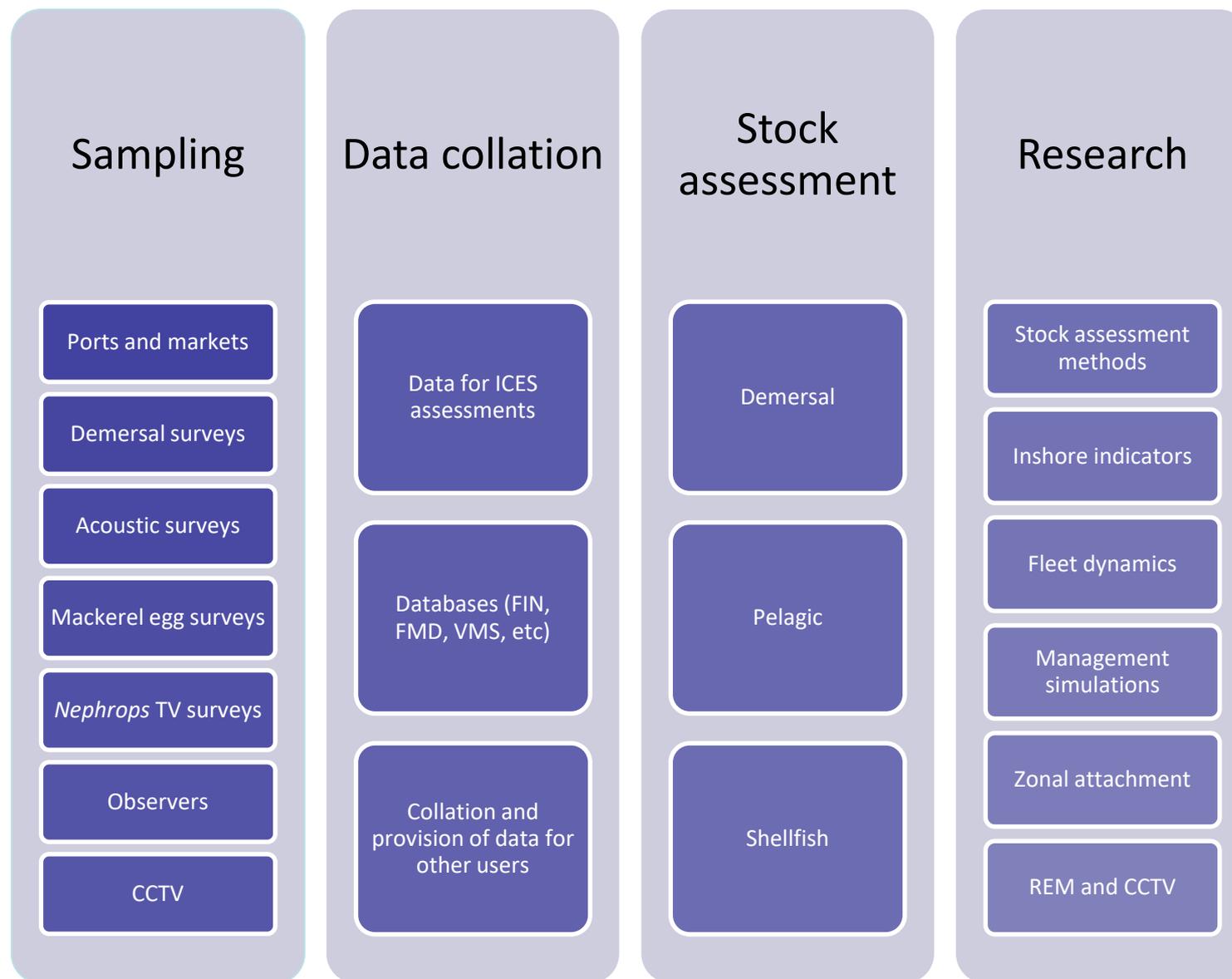
Fishing pressure



Spawning Stock Biomass

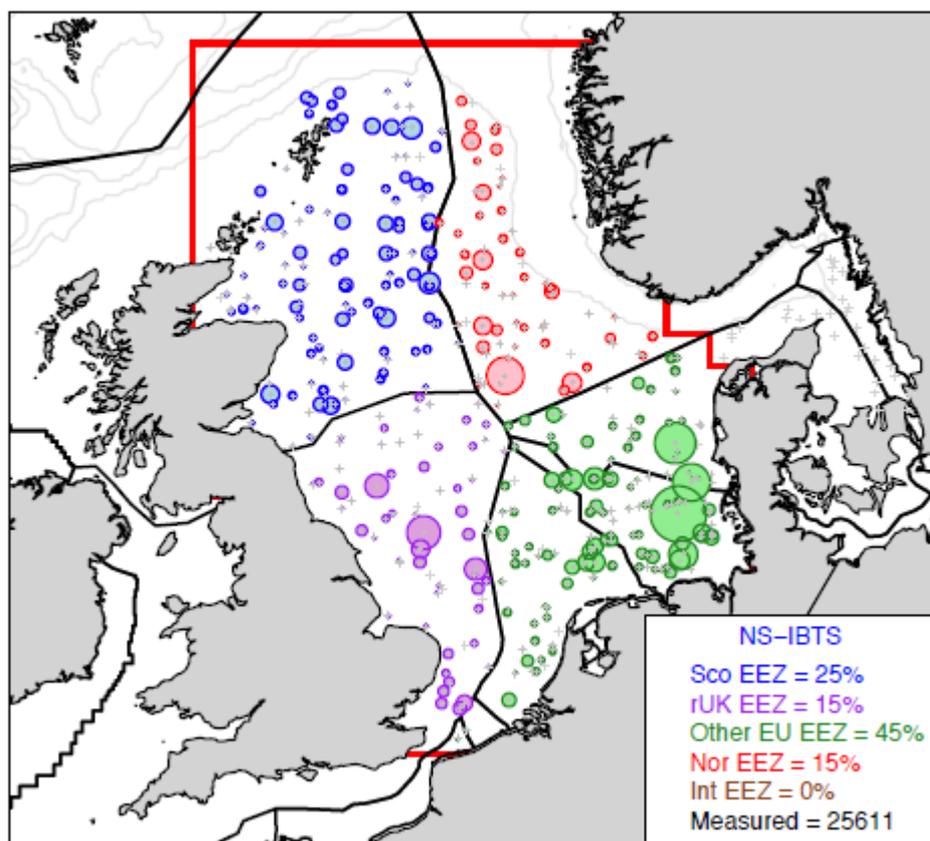


# MSS fisheries: what we do

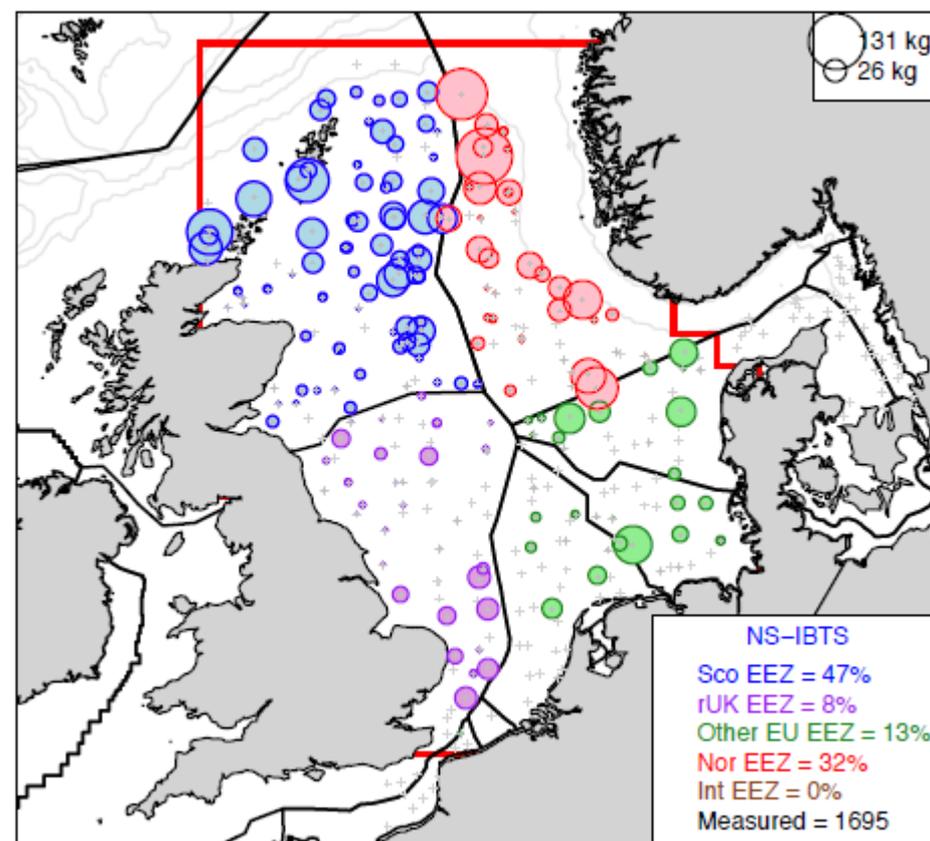


# Example: Zonal attachment

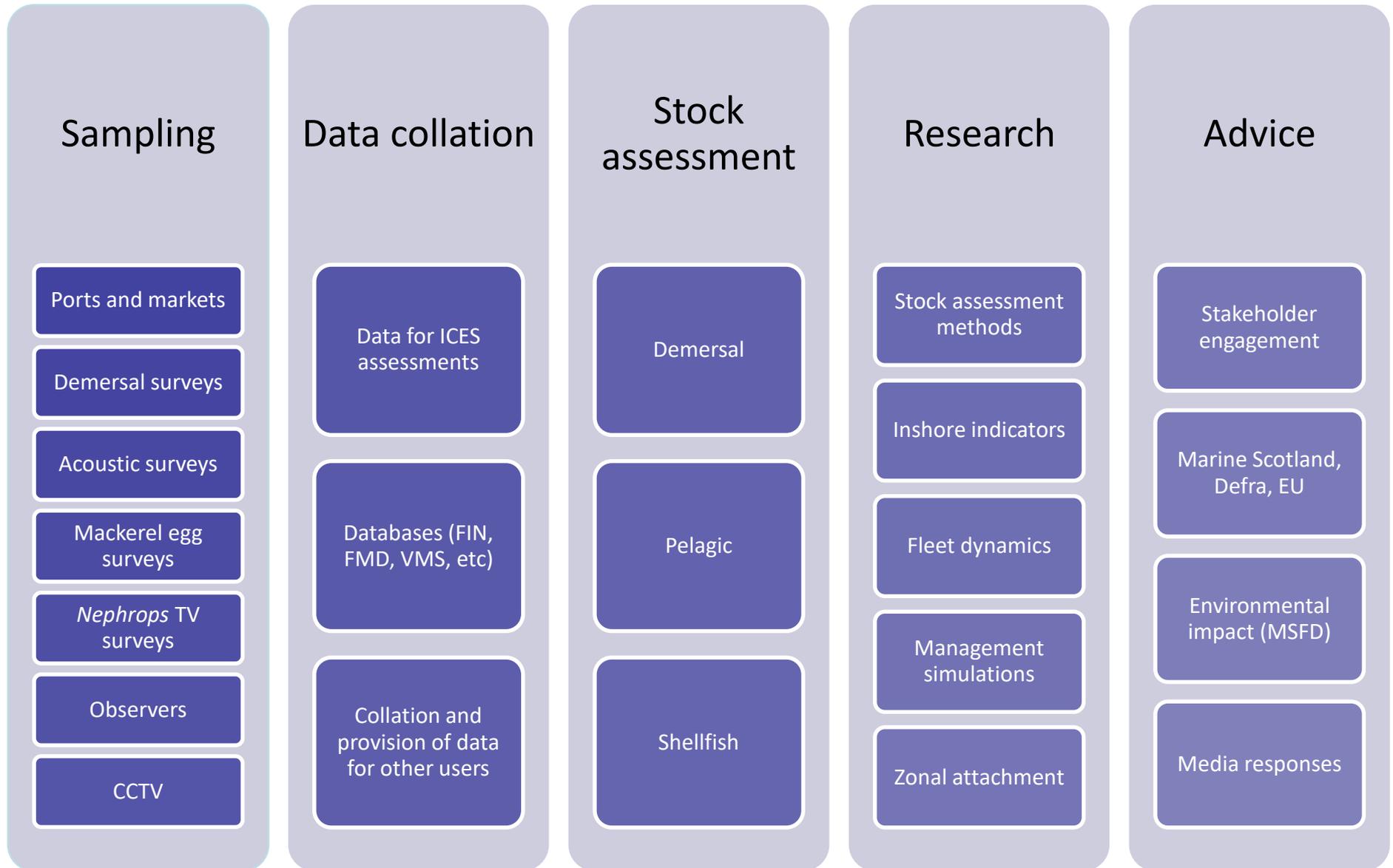
Cod 1983 Q1: biomass within area (4)



Cod 2019 Q1: biomass within area (4)



# MSS fisheries: what we do



# Advice & stakeholder engagement



# Advice & stakeholder engagement

## The Telegraph

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### Just 100 cod left in North Sea

Overfishing has left fewer than 100 adult cod in the North Sea, it was reported.



Not a single cod aged over 13 was caught in the North Sea last year. Photo: GETTY

Thanks!

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