Biological status and developments of stocks in NEAFC area

NEAFC 36th Annual Meeting

13 – 17 November 2017
IBERIA (8c, 9a):
- Hake
- Anchovy
- Anglerfish (*pisc.*)
- Anglerfish (*budeg.*)
- Hake
- Horse mackerel
- Megrim (*whiff.*)
- Megrim (*bosc.*)
- Sardine
- Seabass
- Sole

8 and 9:
- Plaice
- Pollack
- Whiting

Bay of Biscay & Iberia ecoregion
Bay of Biscay and the Iberian Coast Ecoregion

ICES Stock Assessment Database, 2017/November. ICES, Copenhagen
Bay of Biscay & Iberia ecoregion

Hake, southern stock

Four-spot megrim

Sardine, Bay of Biscay
Celtic Seas ecoregion

**West of Scotland & Rockall**
- Cod
- Haddock
- Herring
- Whiting
- Megrim

**Celtic Sea & West, Southwest Ireland**
- Cod
- Haddock
- Herring
- Whiting
- Plaice
- Sole
- Anglerfish
- Pollach
- Sea bass

**Irish Sea**
- Cod
- Haddock
- Whiting
- Plaice
- Herring
- Sole

**Celtic Seas ecoregion**
Celtic Seas Ecoregion

ICES Stock Assessment Database, 2017/November. ICES, Copenhagen
Cod west of Scotland

Herring Irish Sea, Celtic Sea, and southwest of Ireland

Sole Bristol Channel, Celtic Sea
North Sea, Skagerrak and Kattegat

- Cod in Kattegat
- Whiting in 3a
- Sole in 3a & SD 22-24
- Turbot in 3a
- Nephrops in 3a
- Plaice SD 21-23

- Cod (4, Skagerrak, 7d)
- Haddock (Northern Shelf)
- Whiting (4, 7d)
- Saithe (4, 3a, 6)
- Sole (4)
- Plaice (4, Skagerrak)
- Nephrops (4)
- Northern hake
- Sea bass (4bc, 7a, 7d-h)

- Megrim
- Turbot
- Brill
- Dab
- Flounder
- Lemon sole
- Witch
- Striped red mullet
North Sea – Landings (t) by stock exclude sandeel, herring and sprat
North Sea ecoregion – Developments in stock size and exploitation

Greater North Sea Ecoregion

F/F_{MSY} vs Year

SSB/MSY vs Year

ICES Stock Assessment Database, 2017/November. ICES, Copenhagen
North Sea cod

North Sea plaice

North Sea herring
Cod in Division 5.a (Iceland grounds)

Greenland halibut in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland)

Haddock in Division 5.a (Iceland grounds)
Cod in subareas 1 and 2 (Northeast Arctic)

Haddock in subareas 1 and 2 (Northeast Arctic)

Saith in subareas 1 and 2 (Northeast Arctic)
General trend in stock size and exploitation

Northern hake

Plaice North Sea
North Sea plaice

Plaice North Sea

Age composition

Growth

Plaice - benthic invertebrates

AM 2017 Report – Annex L
Mackerel catches by geographical area

- Subareas 3, 4
- Subarea 6
- Subarea 7; Div 8abde
- Subareas 1, 2, 5, 14
- Div 8c, 9a

Northern hake

Anchovy

Distribution

AM 2017 Report – Annex L
ICES Fisheries overviews

- Landings
- Fishing effort
- Spatial distribution
- Temporal trends in F and SSB
- Species interaction
- Swept area

AM 2017 Report – Annex L
ICES Ecosystem overviews

Management Politics

Social & use

Chlorophyll

Benthic Habitat

Pelagic Habitat

NORTH SEA

Human activities

Fishing

Coastal construction

Maritime transport

Offshore structures

Tourism and recreation

Navigation dredging

Telecommunications

Aggregate extraction

Military

Renewable energy

Pressures

Selective extraction of species

Abrasion

Substrate loss and smothering

Selective extraction non-living resources

State

Habitat

Foodwebs

Productivity

Plantton

Benthos

Fish

Seabirds

Marine mammals

Always vary (influenced by environmental drivers)

Activities and pressures on the ecosystem susceptible to regional management

Science for sustainable seas
Thank you