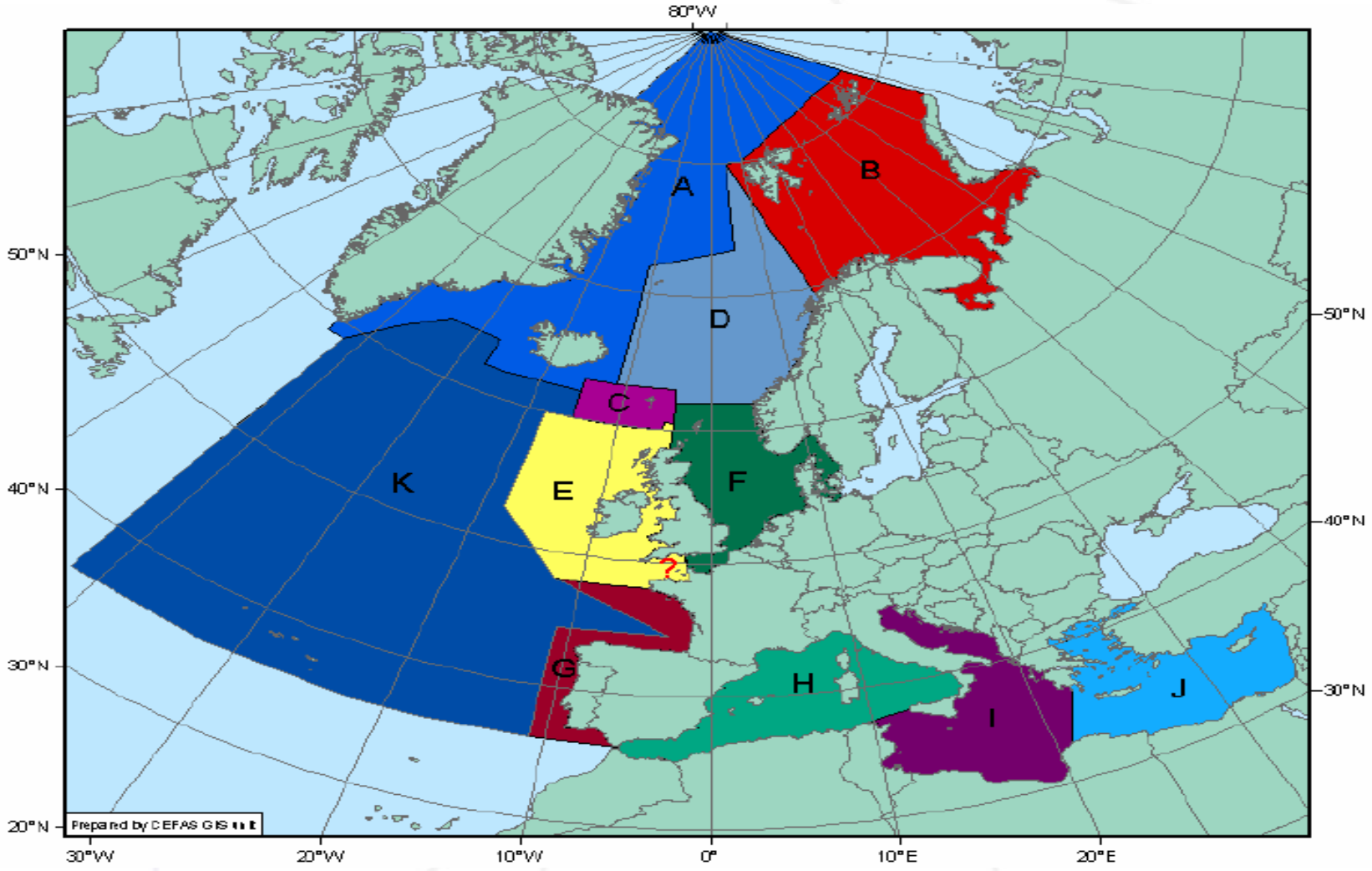
Northeast Atlantic Stocks

State of Fish Stocks and the Economics of Fishing Fleets
Seminar, Brussels 15 July 2016
Eskild Kirkegaard, ICES ACOM Chair

ICES
CIEM
Science for sustainable seas

- Iceland and East Greenland Seas
- Barents Sea
- Faroe Plateau Ecosystem
- Norwegian Sea
- Celtic Sea and West of Scotland
- North Sea
- Bay of Biscay and Iberian Waters
- Baltic Sea
- Oceanic northeast Atlantic



Developments in stock size and exploitation

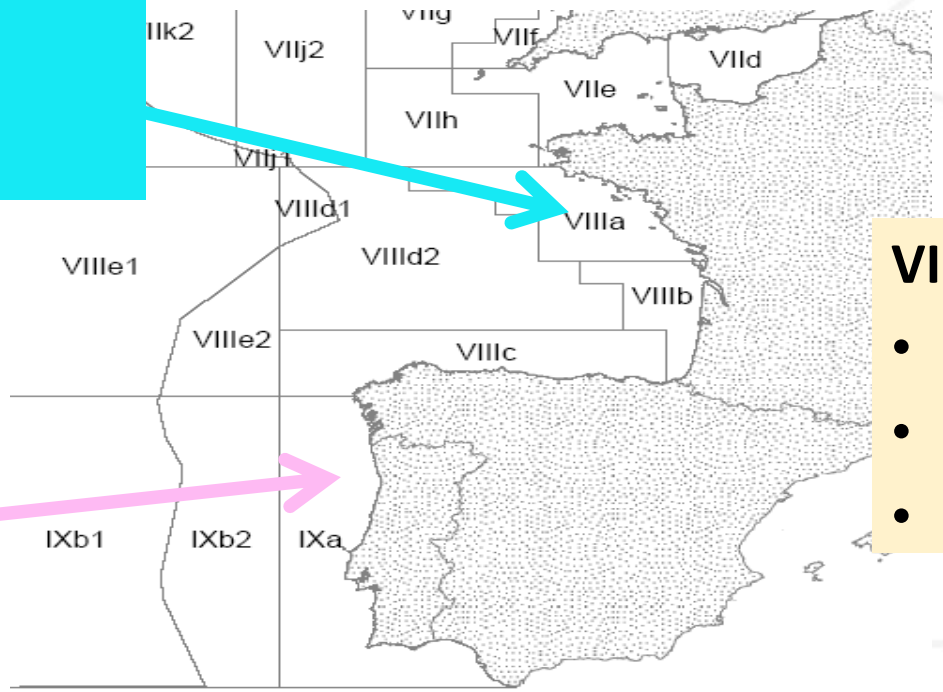
Link between fishing mortality and stock size

BAY OF BISCAY:

- **Sardine**
- **Sole**
- **Seabass**

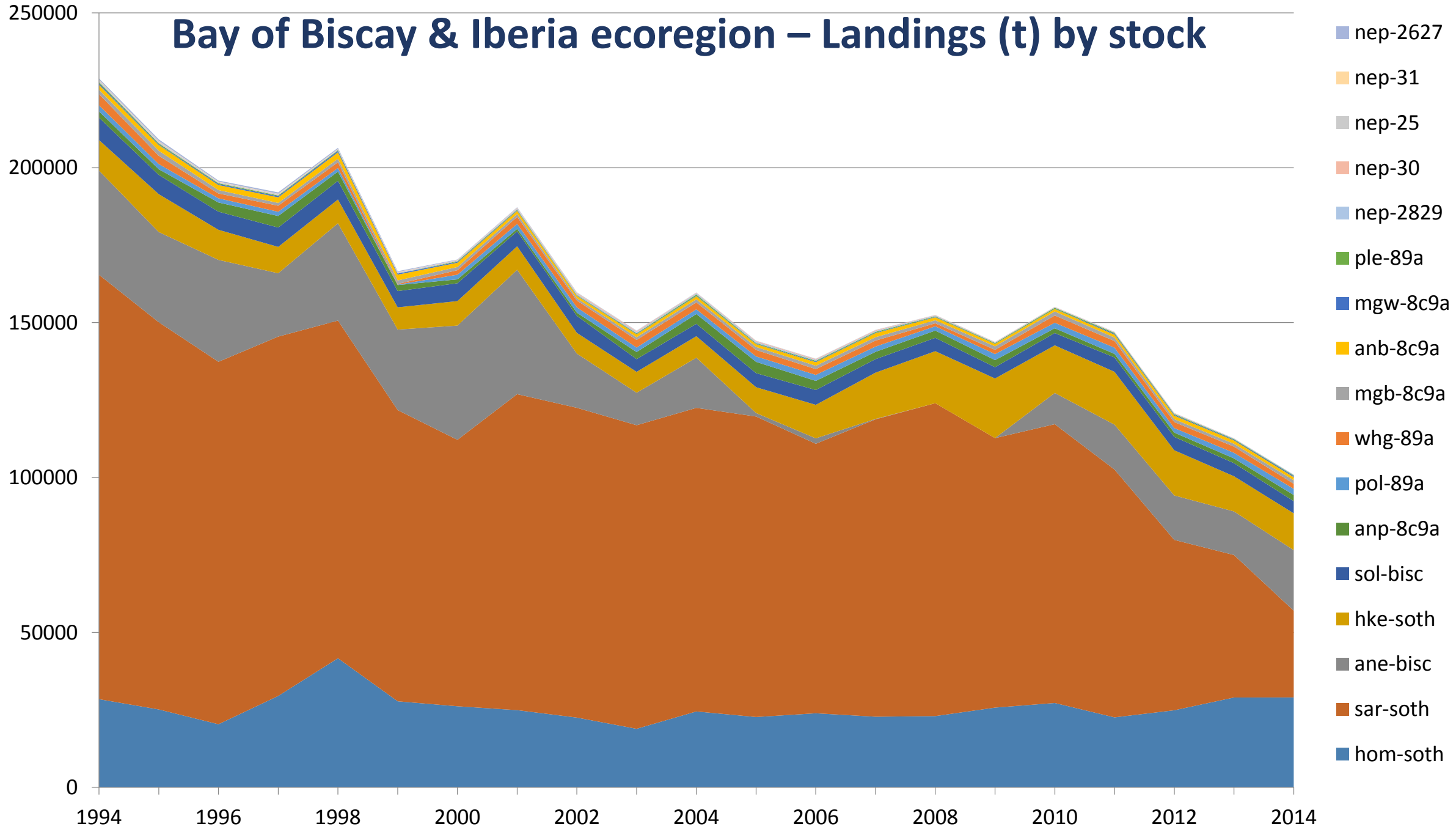
IBERIA (VIIIc, IXa):

- **Hake**
- **Anchovy**
- **Anglerfish (*pisc.*)**
- **Anglerfish (*budeg.*)**
- **Hake**
- **Horse mackerel**
- **Megrim (*whiff.*)**
- **Megrim (*bosc.*)**
- **Sardine**
- **Seabass**
- **Sole**

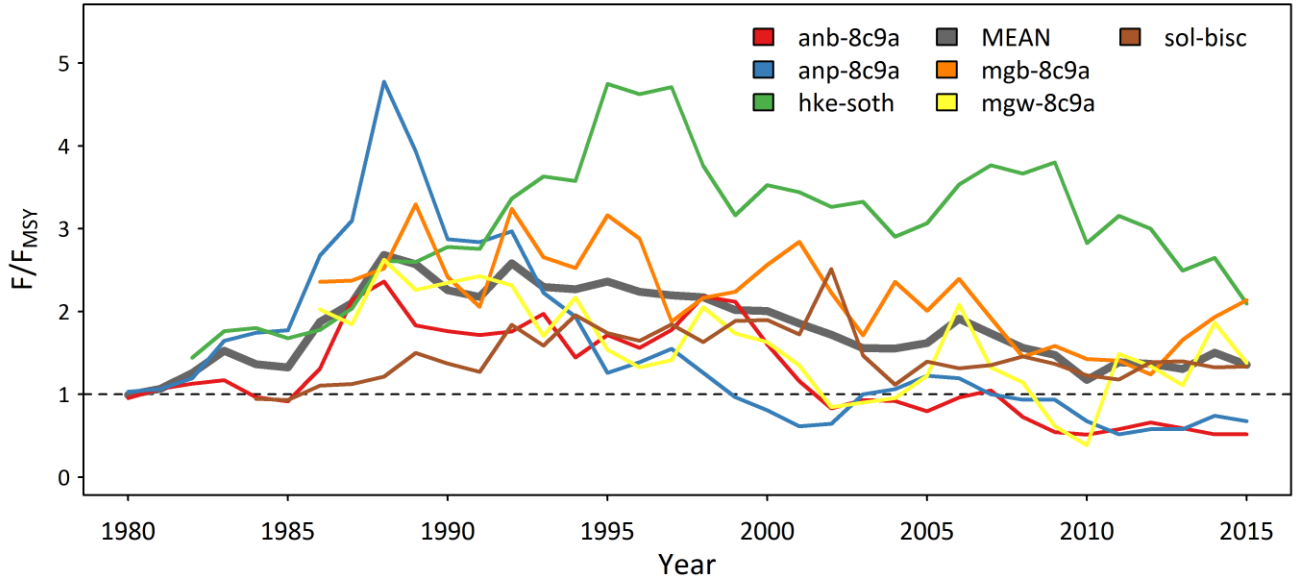


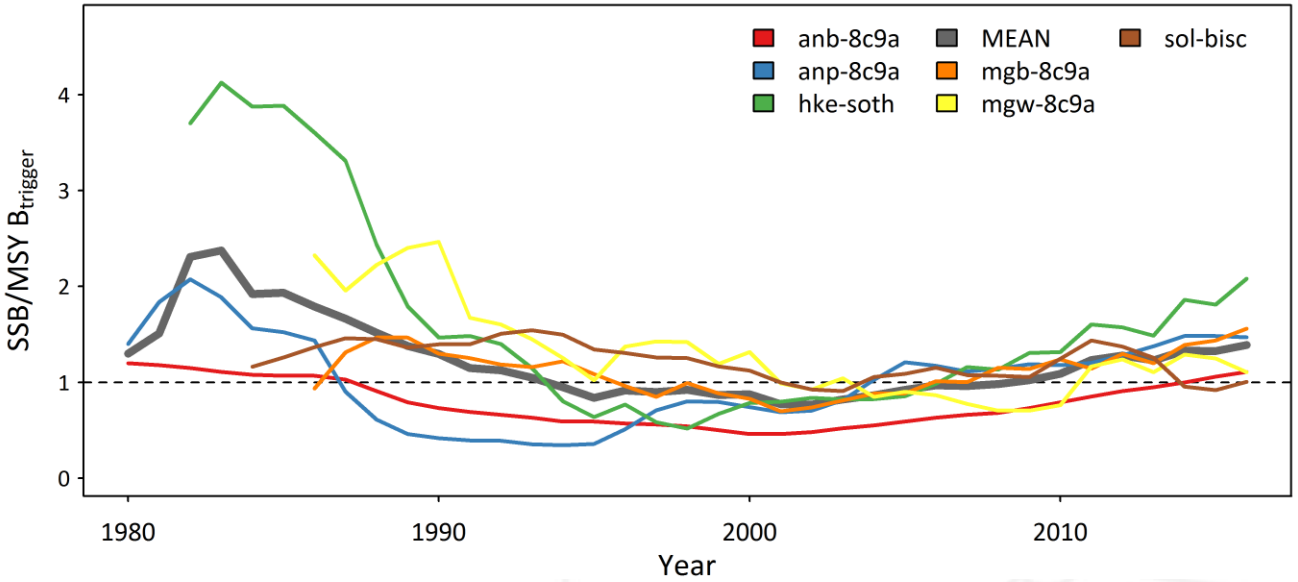
VIII and IX

- **Plaice**
- **Pollack**
- **Whiting**

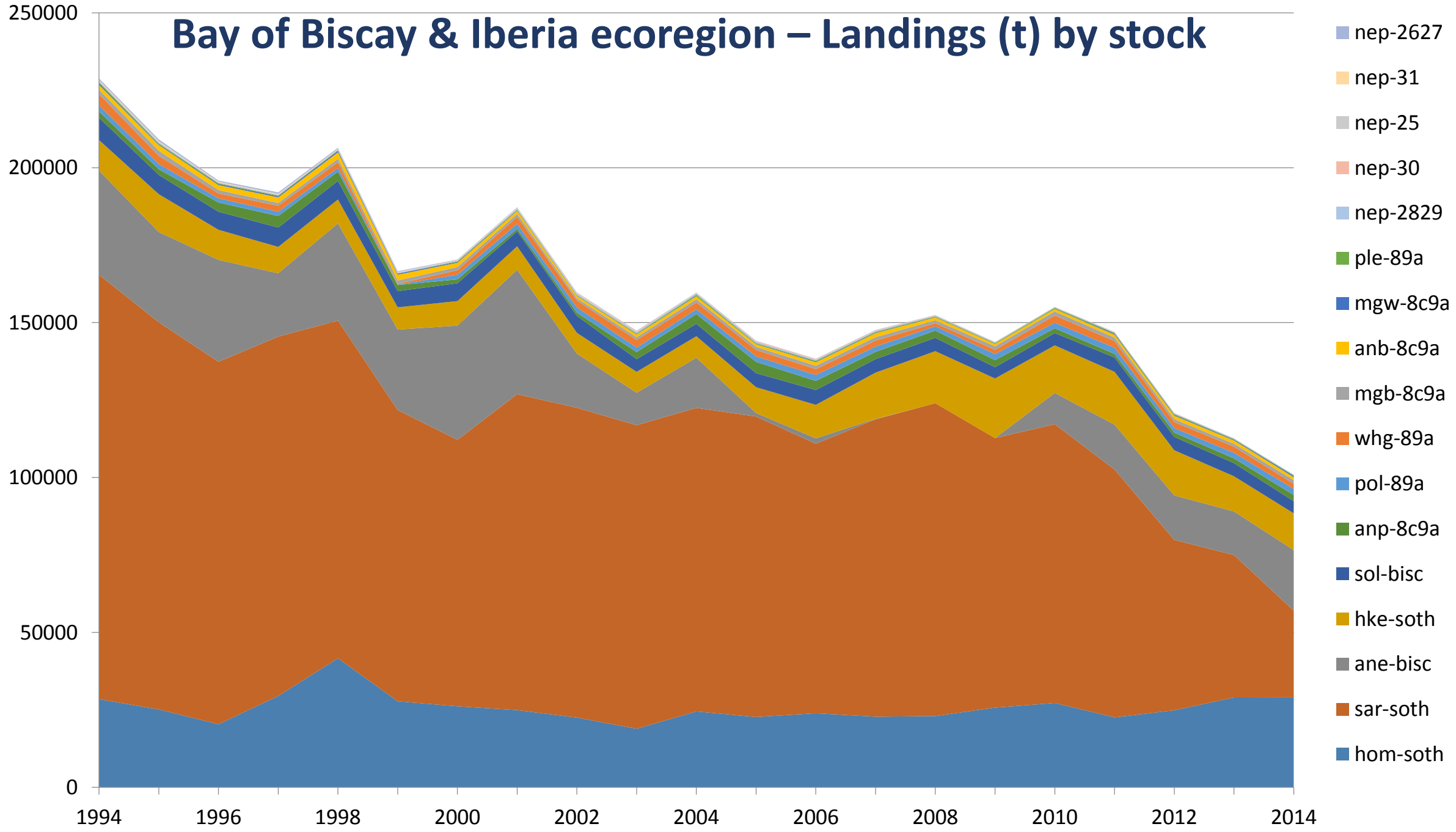

Bay of Biscay & Iberia ecoregion – Landings (t) by stock
250000
200000
150000
100000
50000
0
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
nep-2627
nep-31
nep-25
nep-30
nep-2829
ple-89a
mgw-8c9a
anb-8c9a
mgb-8c9a
whg-89a
pol-89a
anp-8c9a
sol-bisc
hke-soth
ane-bisc
sar-soth
hom-soth

Bay of Biscay and Iberian Sea





Bay of Biscay & Iberia ecoregion – Developments in stock size and exploitation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250000
200000
150000
100000
50000
0
1994
1996
1998
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2002
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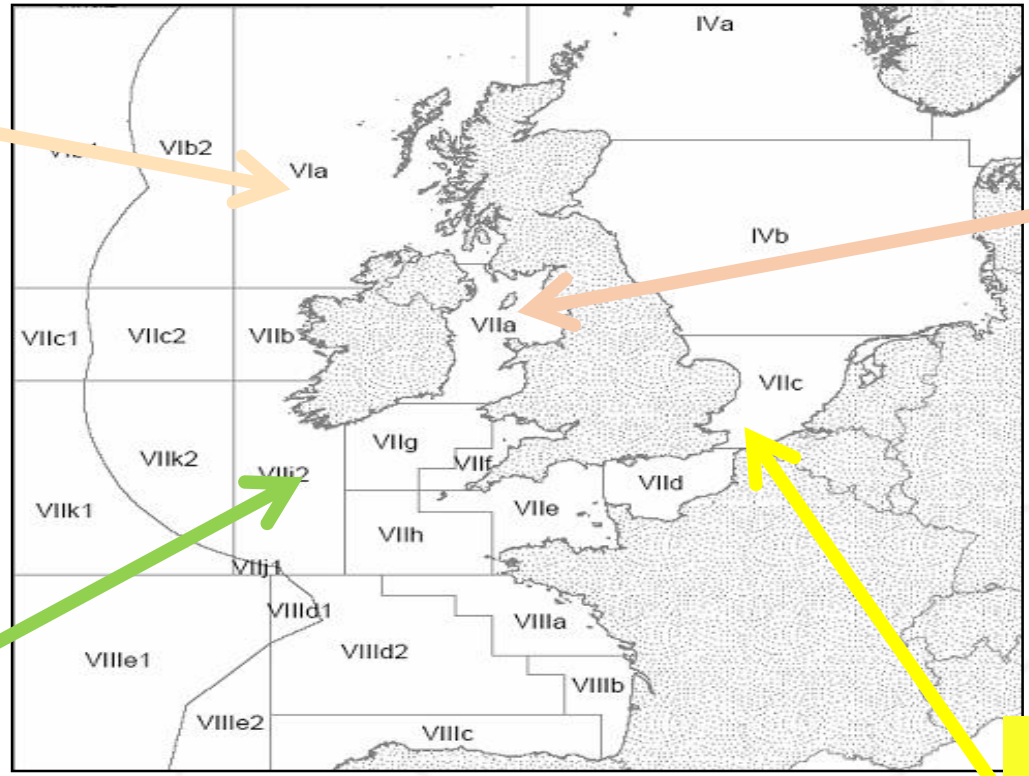
nep-2627
nep-31
nep-25
nep-30
nep-2829
ple-89a
mgw-8c9a
anb-8c9a
mgb-8c9a
whg-89a
pol-89a
anp-8c9a
sol-bisc
hke-soth
ane-bisc
sar-soth
hom-soth

West of Scotland & Rockall

- Cod
- Haddock
- Herring
- Whiting
- Megrim

Celtic Sea & West, Southwest Ireland

- Cod
- Haddock
- Herring
- Whiting
- Plaice
- Sole
- Anglerfish
- Pollach
- Sea bass

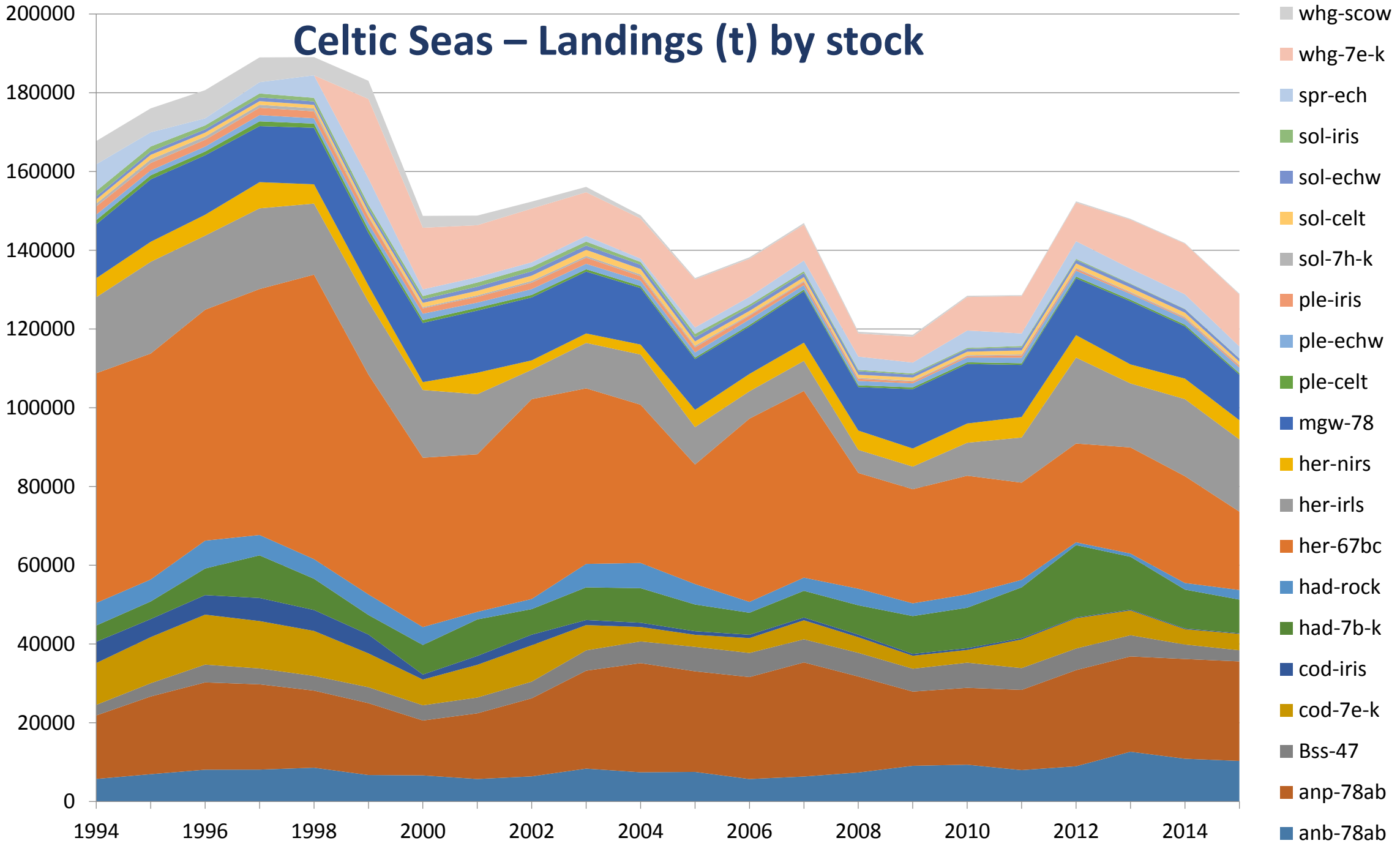


Irish Sea

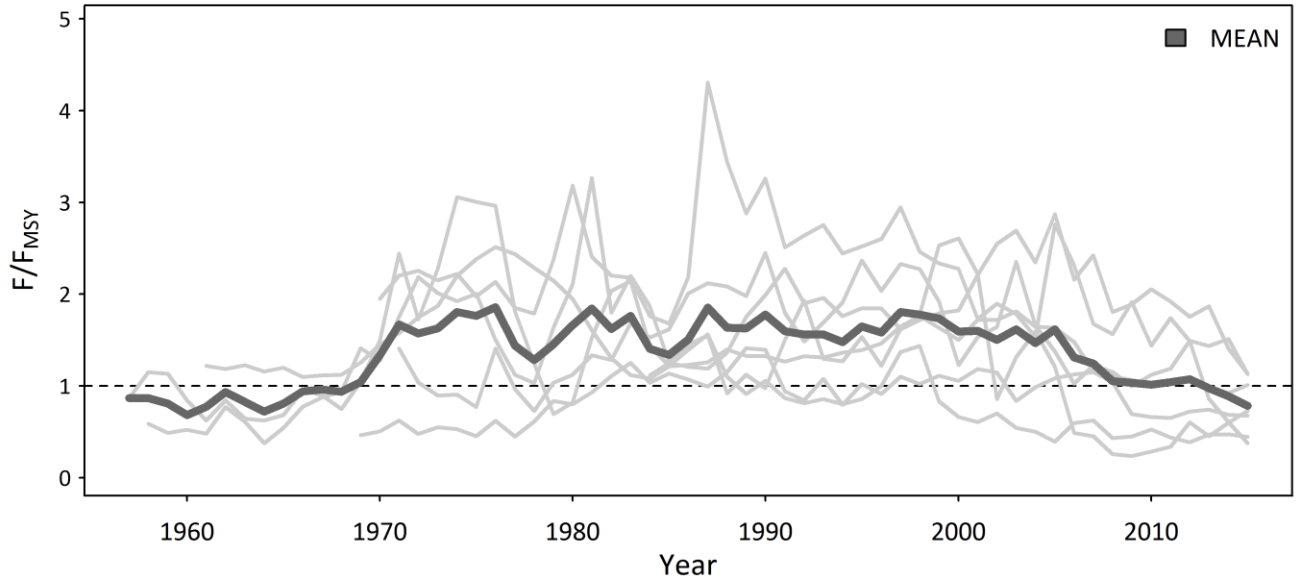
- Cod
- Haddock
- Whiting
- Plaice
- Herring
- Sole

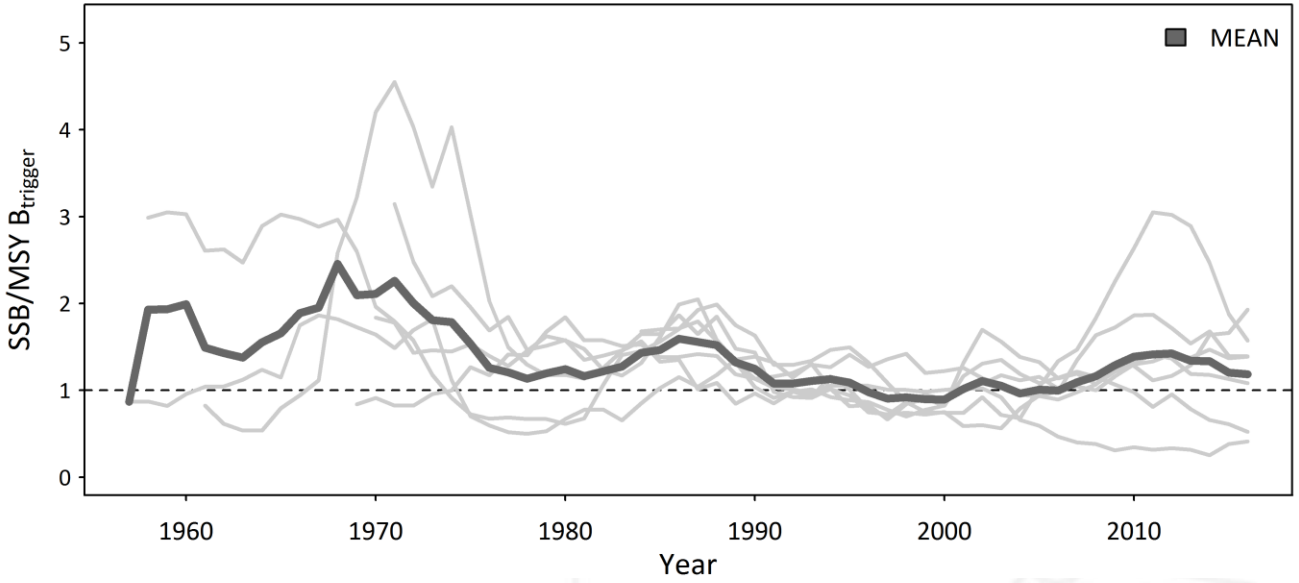
- Cod
- Sole
- Plaice

Celtic Seas ecoregion

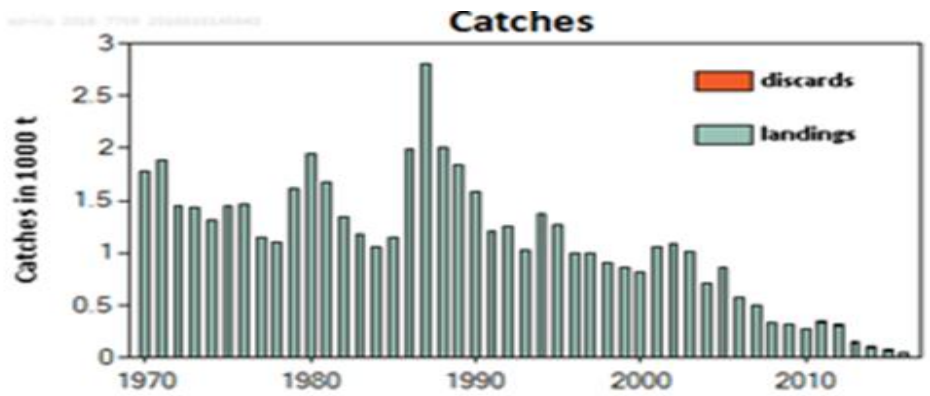

Celtic Seas – Landings (t) by stock
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
whg-scow
whg-7e-k
spr-ech
sol-iris
sol-echw
sol-celt
sol-7h-k
ple-iris
ple-echw
ple-celt
mgw-78
her-nirs
her-irls
her-67bc
had-rock
had-7b-k
cod-iris
cod-7e-k
Bss-47
anp-78ab
anb-78ab

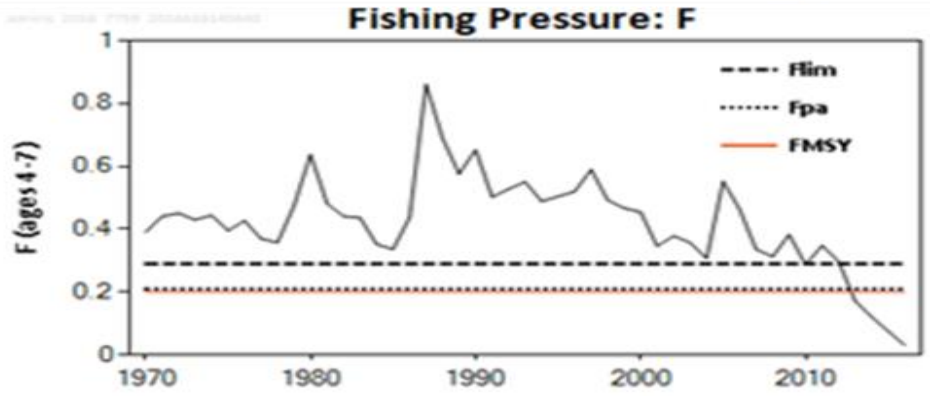
Celtic Sea and West of Scotland

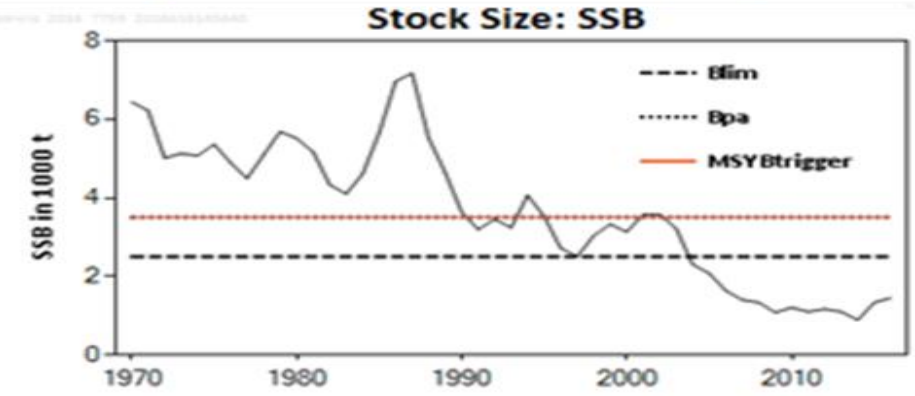




Celtic Sea & West of Scotland ecoregion – Developments in stock size and exploitation

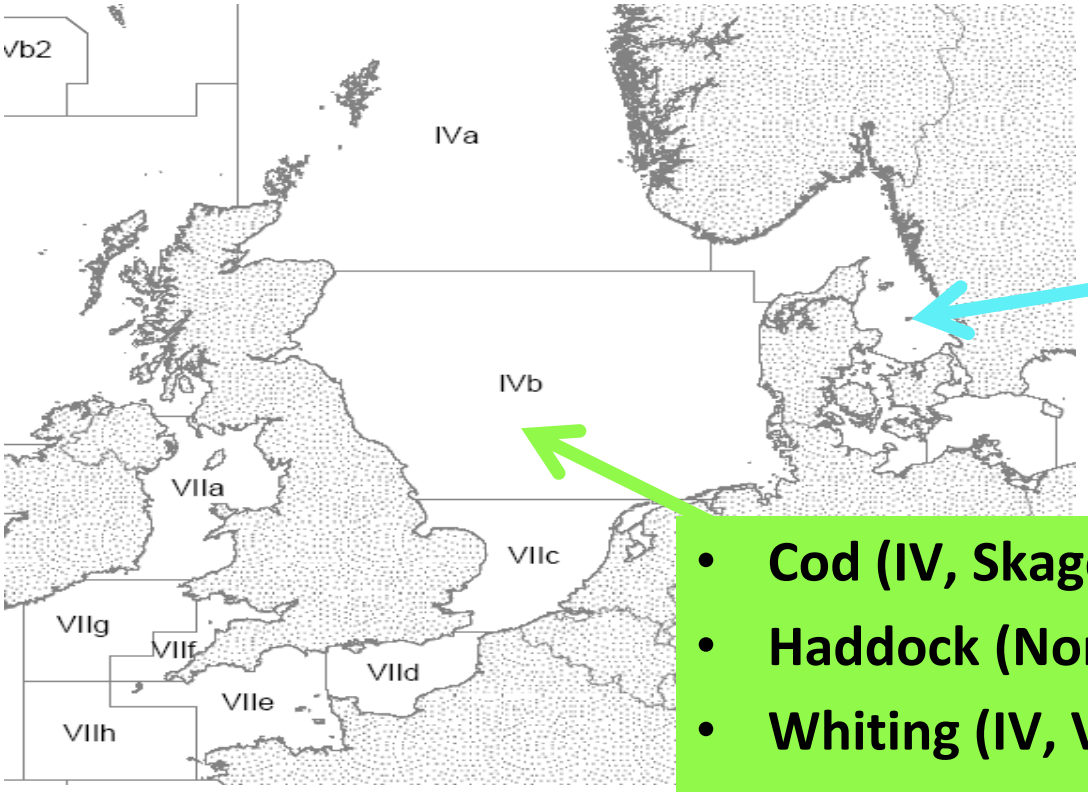






Sole in Division 7.a (Irish Sea)

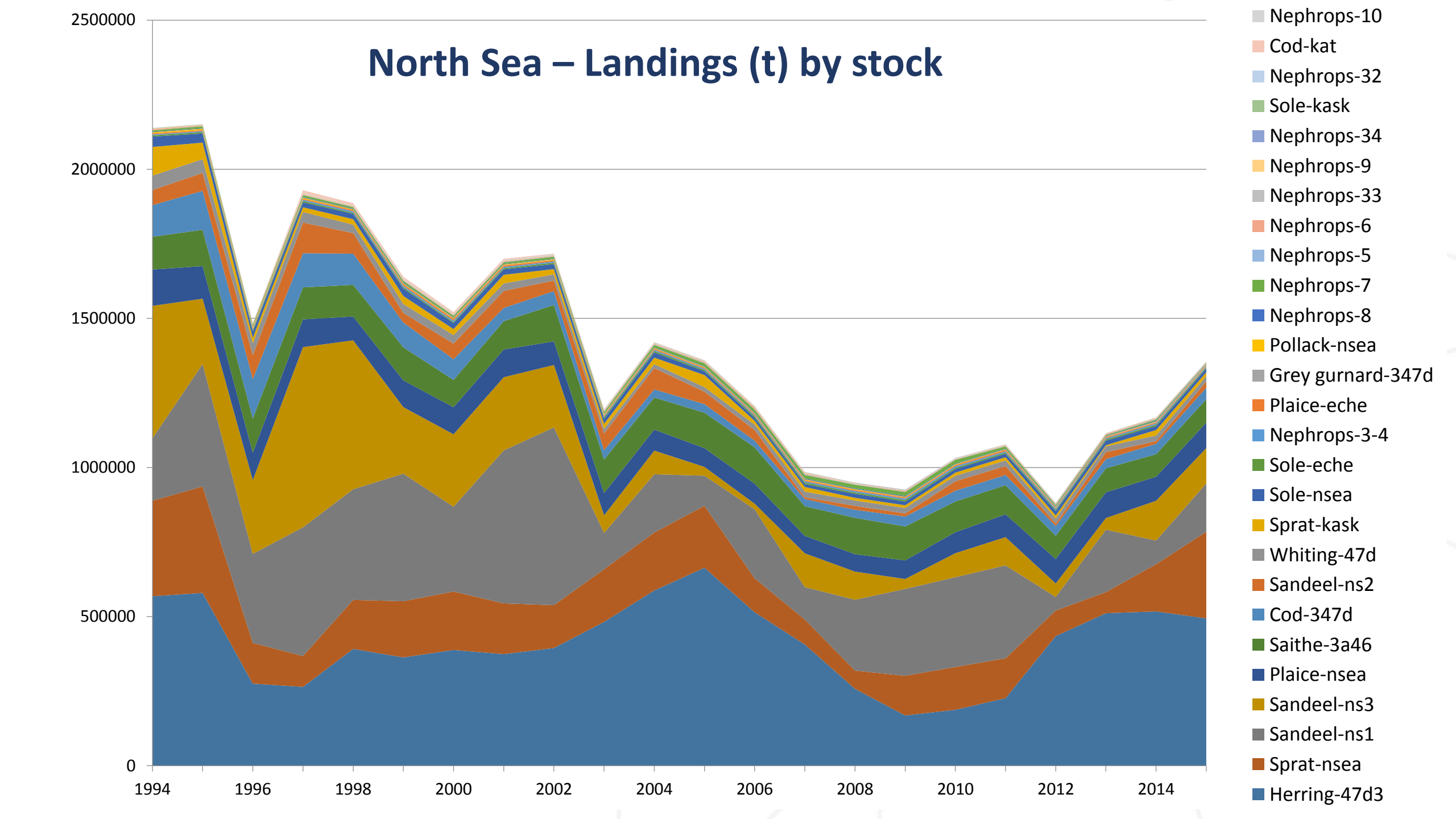
North Sea, Skagerrak and Kattegat

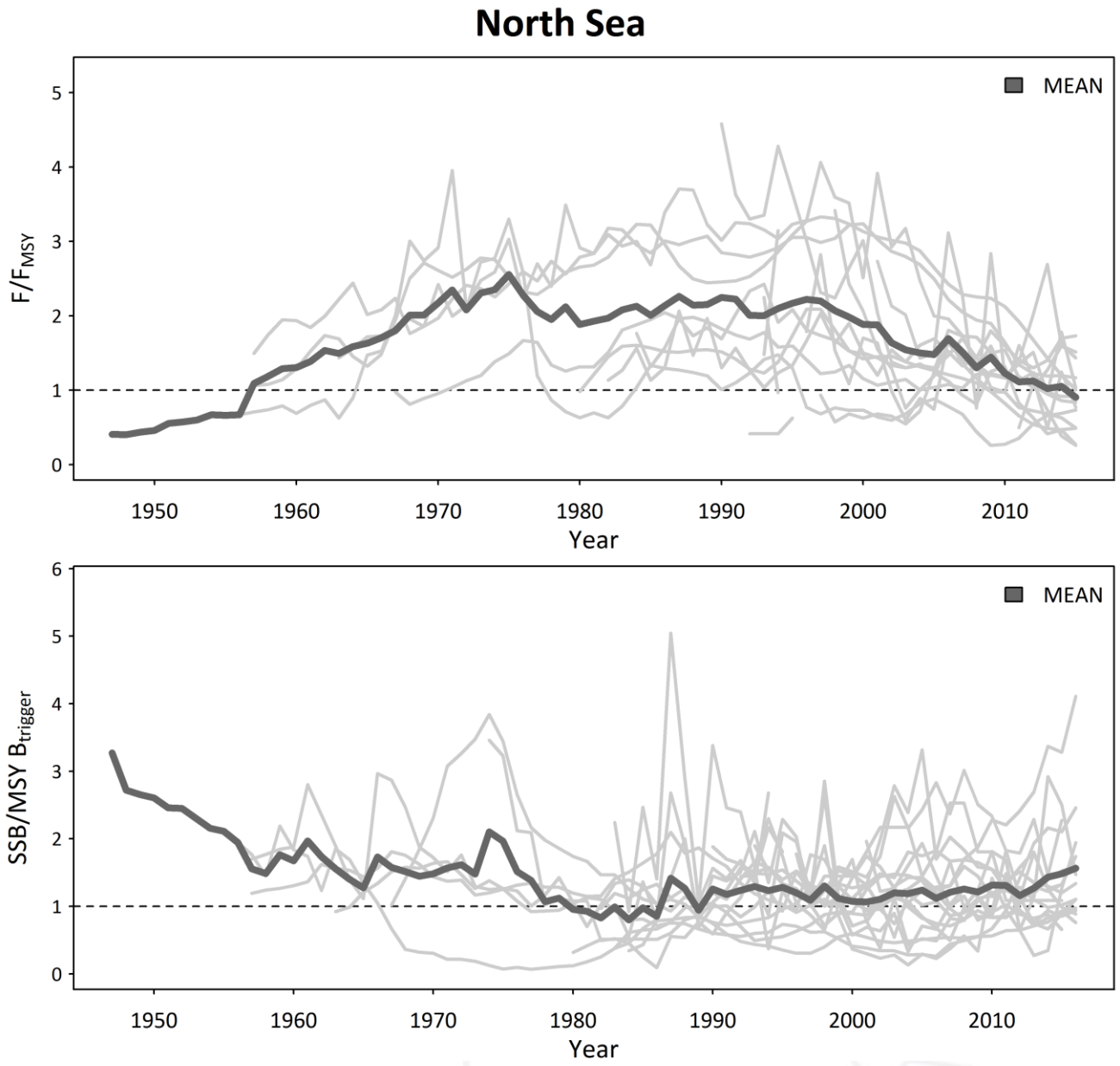


- Cod in Kattegat
- Whiting in IIIa
- Sole in IIIa & SD 22-24
- Turbot in IIIa
- *Nephrops* in IIIa
- Plaice SD 21- 23

- Cod (IV, Skagerrak, VIId)
- Haddock (Northern Shelf)
- Whiting (IV, VIId)
- Saithe (IV, IIIa, VI)
- Sole (IV)
- Plaice (IV, Skagerrak)
- *Nephrops* (IV)
- Northern hake
- Sea bass (IVbc, VIIa, VIId-h)

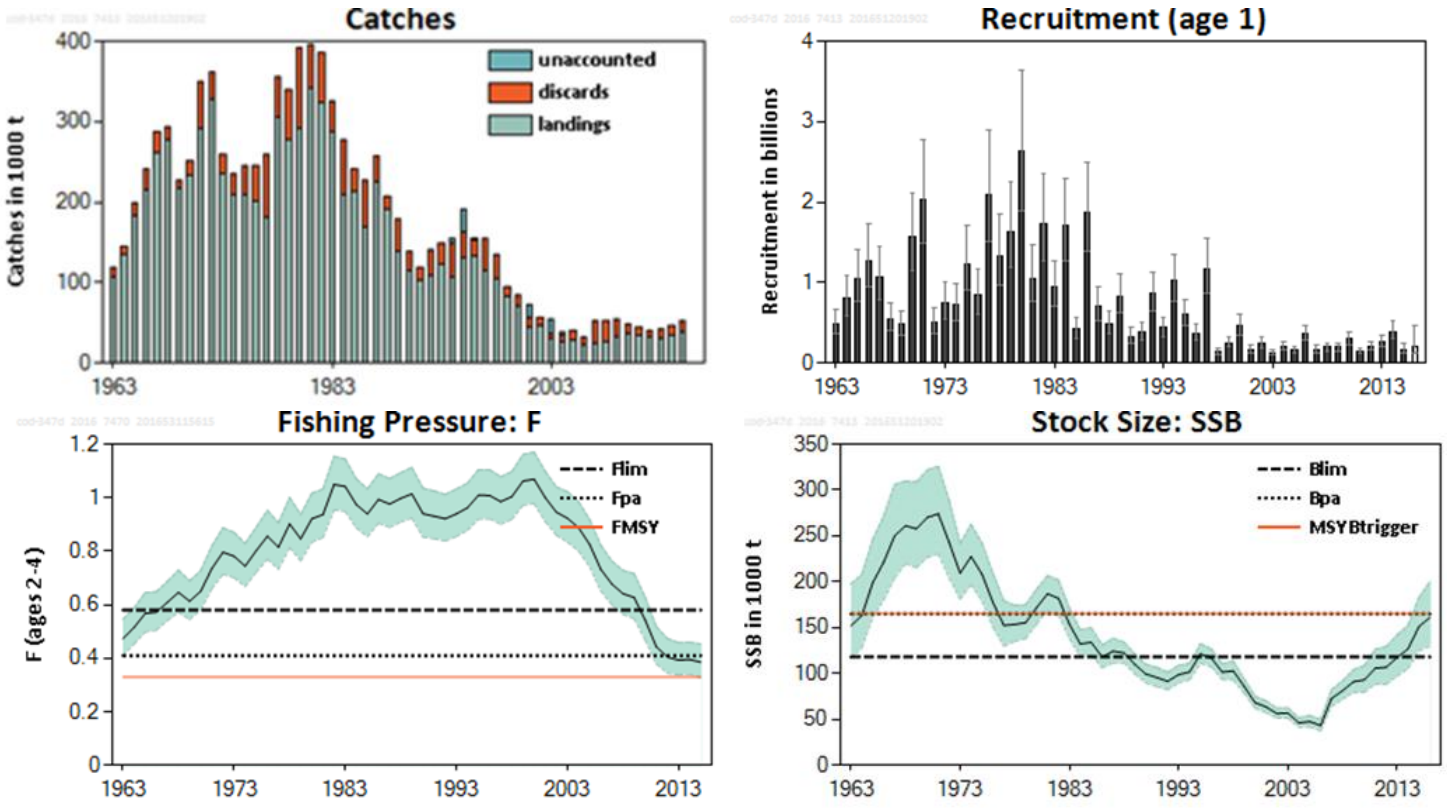
- Megrim
- Turbot
- Brill
- Dab
- Flounder
- Lemon sole
- Witch
- Striped red mullet


North Sea – Landings (t) by stock
2500000
2000000
1500000
1000000
500000
0
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
Nephrops-10
Cod-kat
Nephrops-32
Sole-kask
Nephrops-34
Nephrops-9
Nephrops-33
Nephrops-6
Nephrops-5
Nephrops-7
Nephrops-8
Pollack-nsea
Grey gurnard-347d
Plaice-eche
Nephrops-3-4
Sole-eche
Sole-nsea
Sprat-kask
Whiting-47d
Sandeel-ns2
Cod-347d
Saithe-3a46
Plaice-nsea
Sandeel-ns3
Sandeel-ns1
Sprat-nsea
Herring-47d3



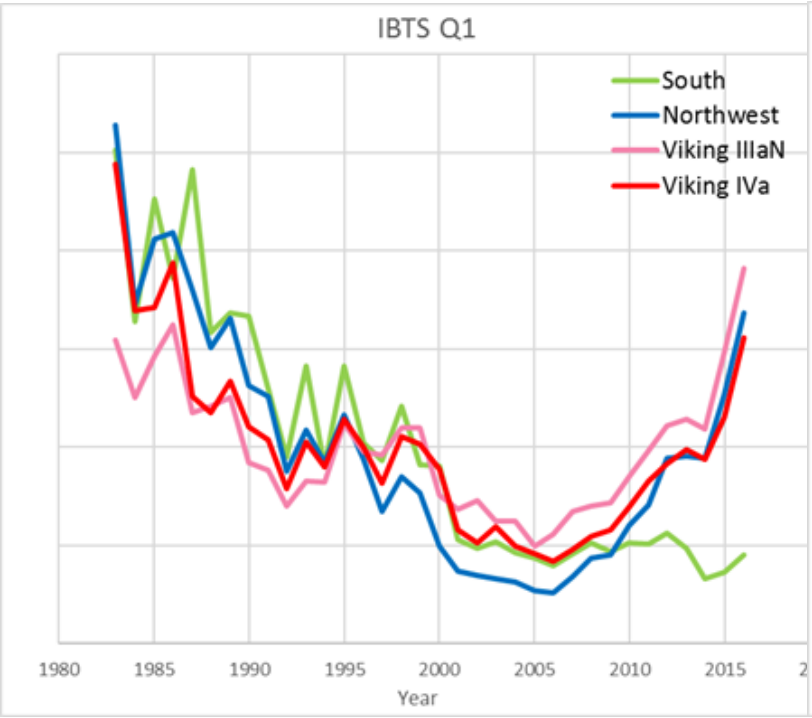
North Sea ecoregion – Developments in stock size and exploitation

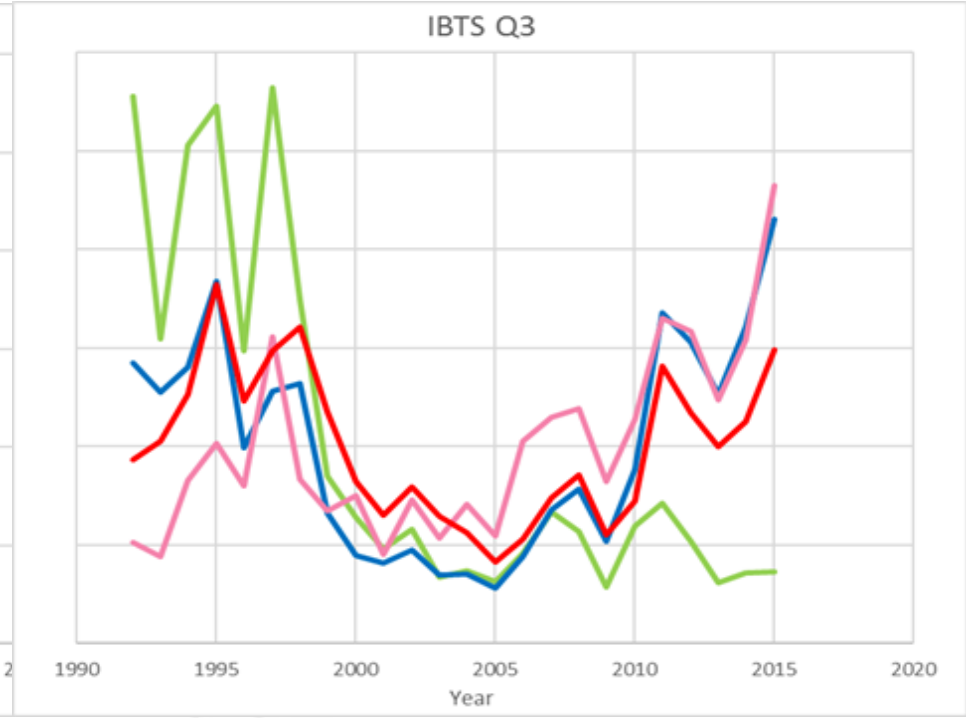
Science for sustainable seas



North Sea cod

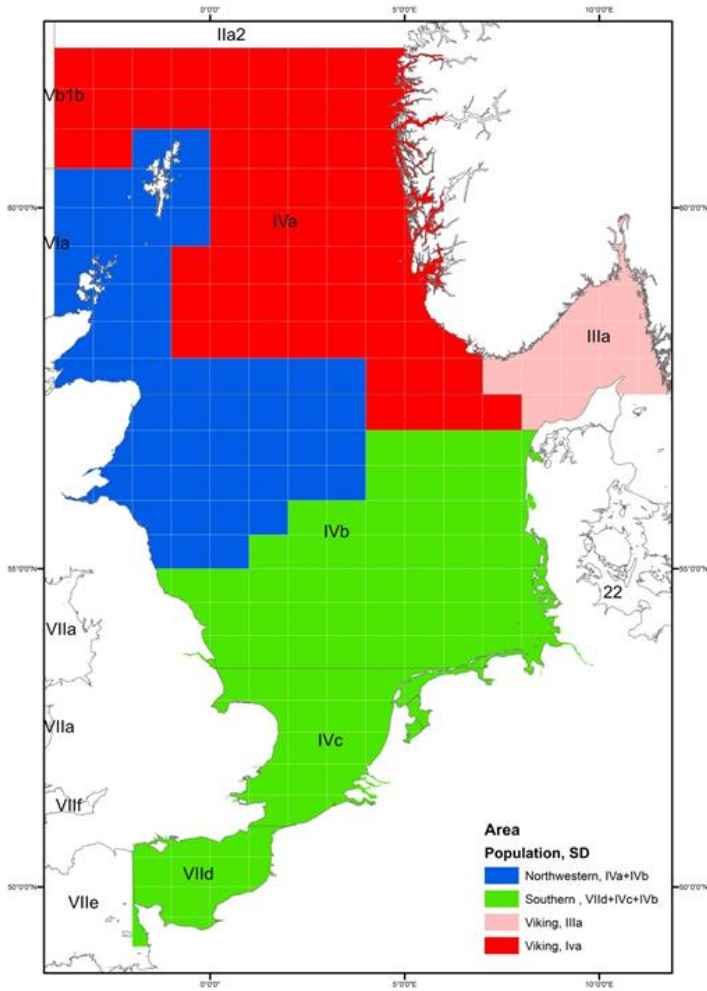
Science for sustainable seas



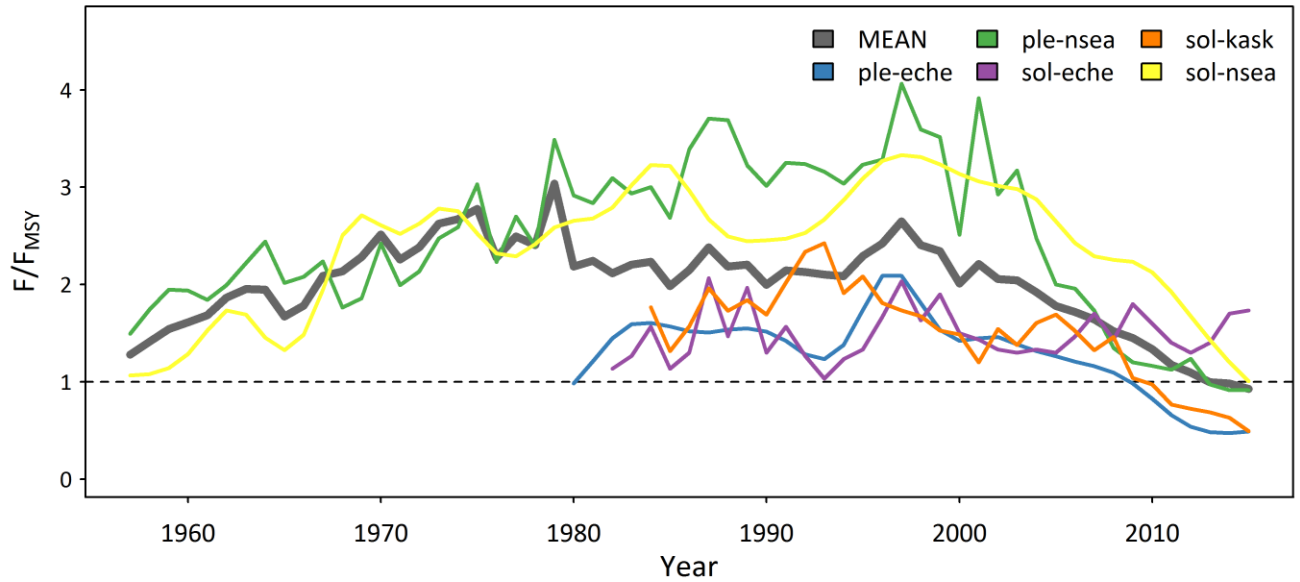


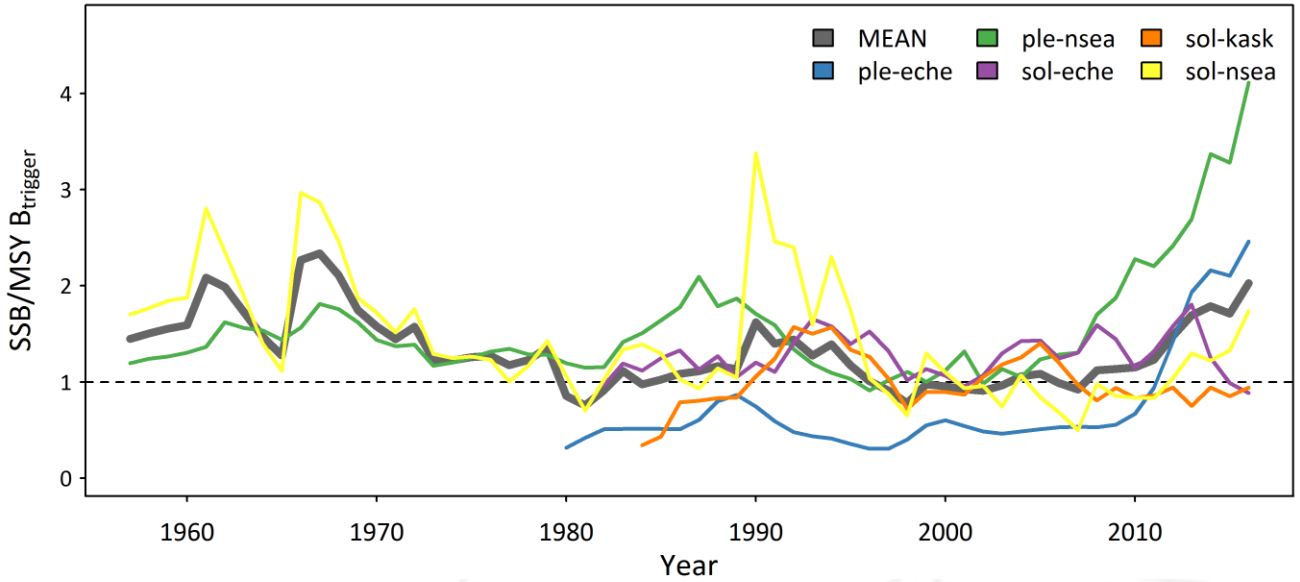
Biomass indices by subregion

- **General increase in all areas apart from the southern area.**
- **Causes are unclear – climate change, biological, and/or fisheries effects ?**

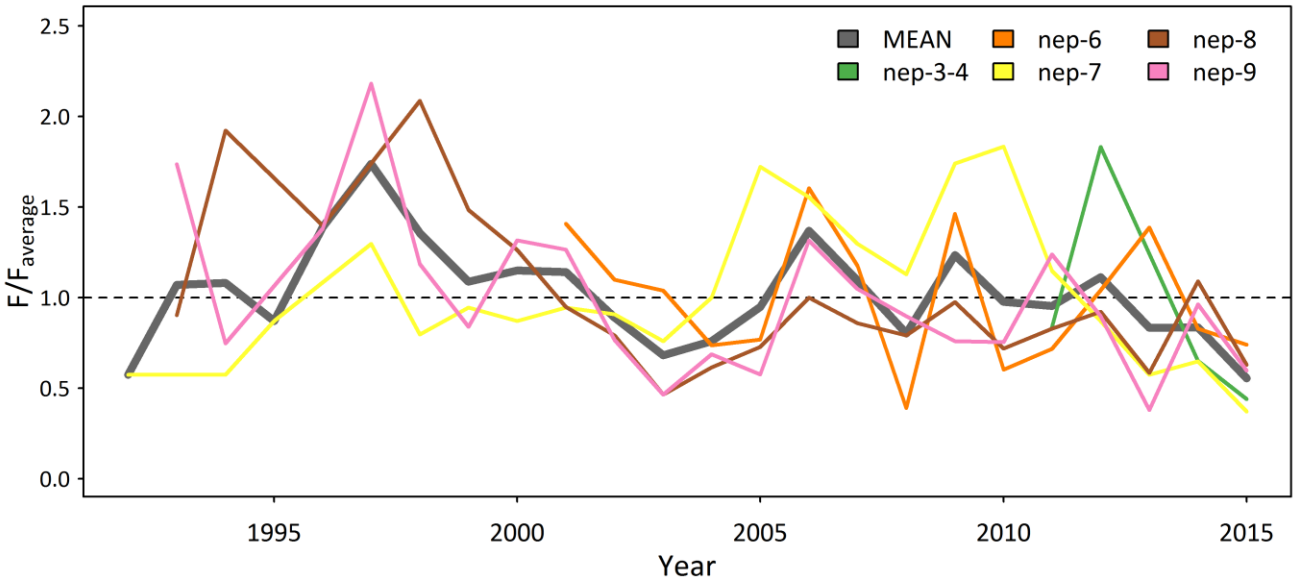


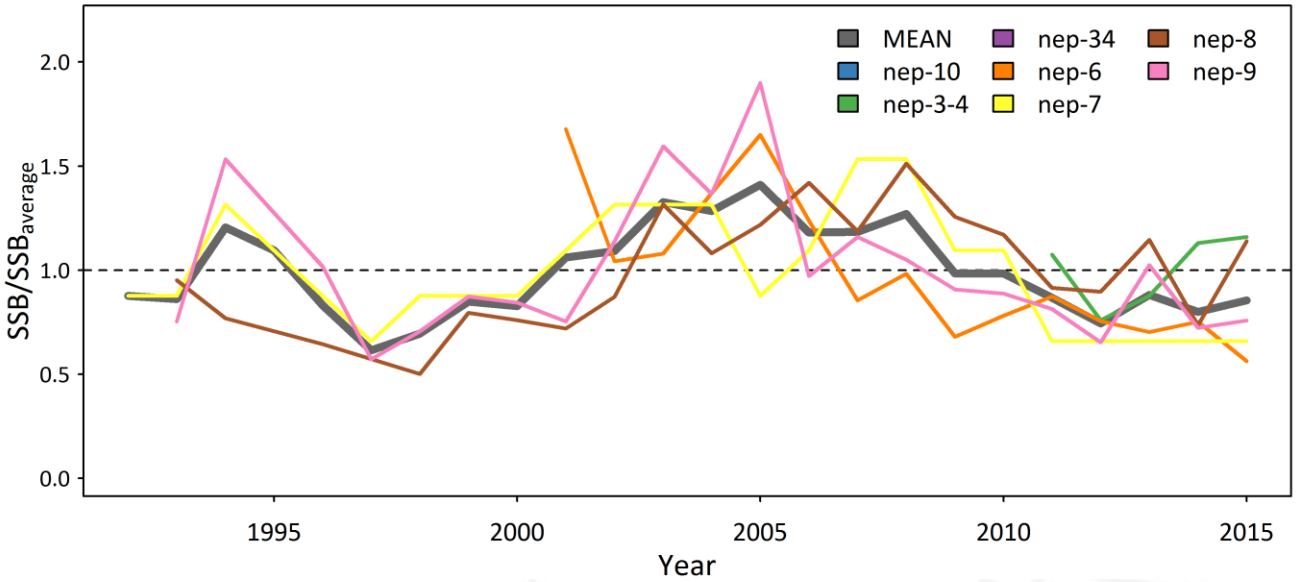
North Sea, Flatfish

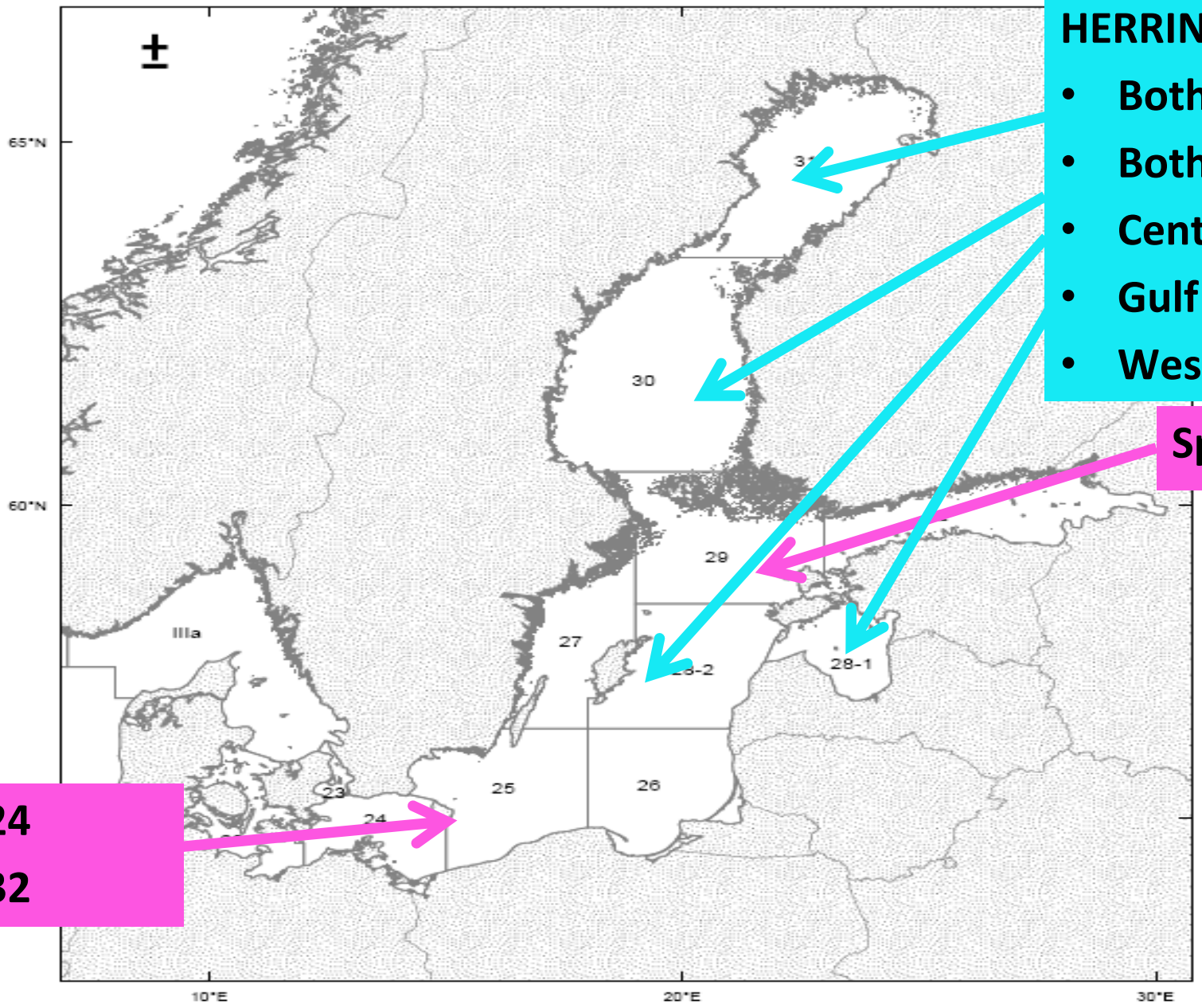




North Sea, Crustacean







HERRING:

- Bothnian Bay
- Bothnian Sea
- Central Baltic
- Gulf Riga
- Western Baltic, IIIa

Sprat SD 22-32

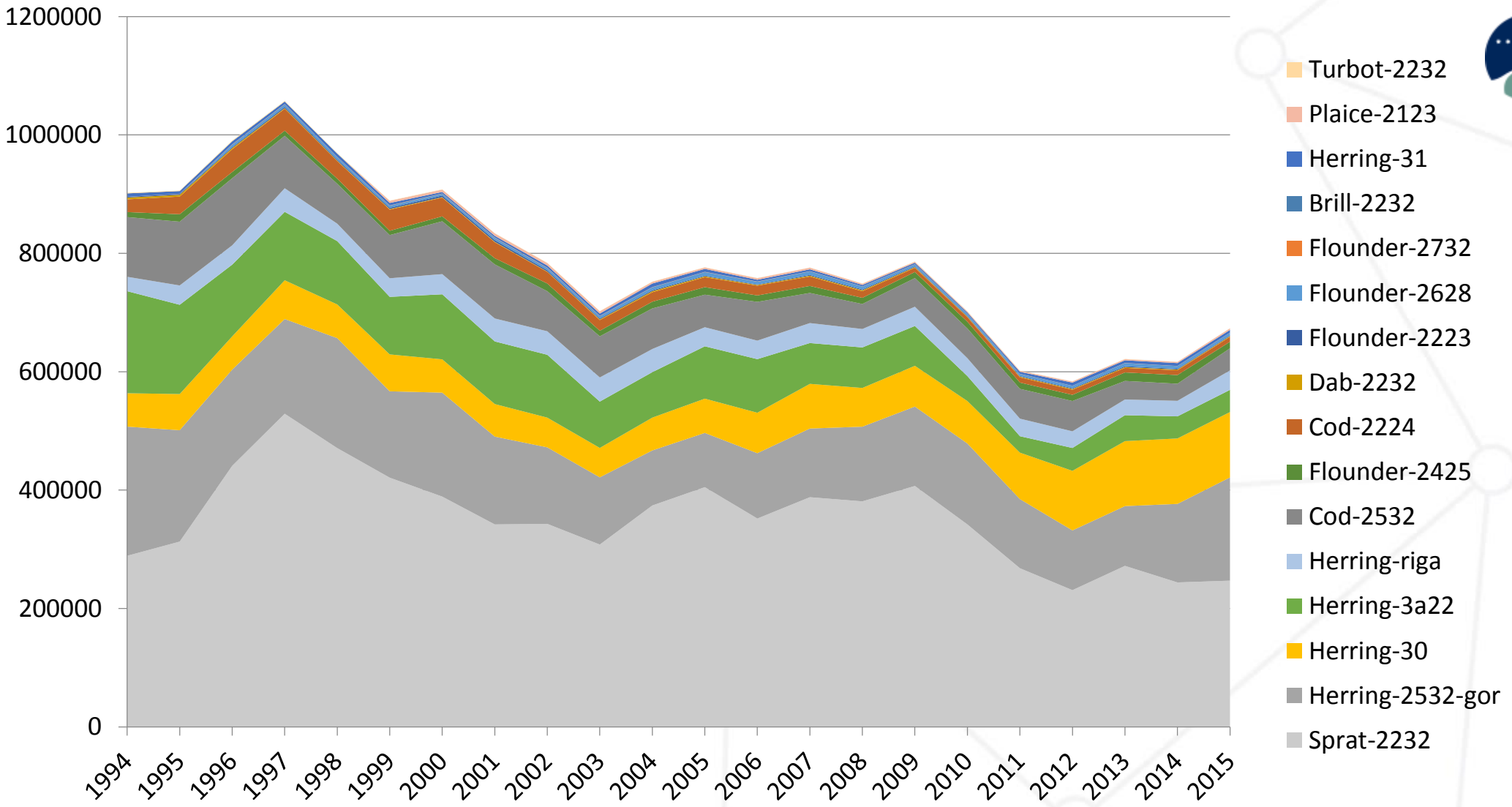
Flatfishes

Plaice, Brill, Dab, Flounder, Turbot

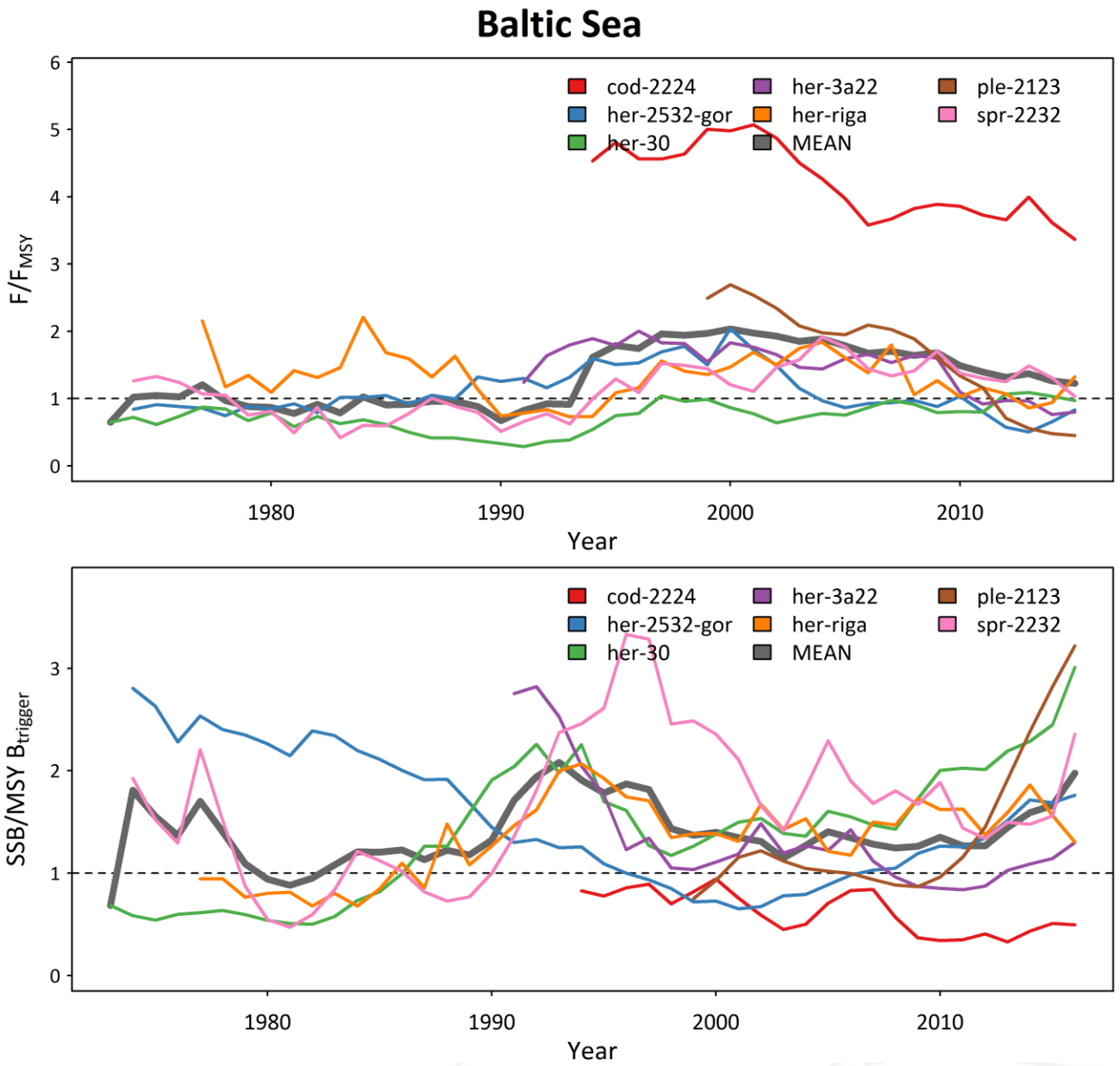
Salmon & Trout

- **Cod SD 22-24**
- **Cod SD 25-32**

Baltic ecoregion



Baltic Sea – Landings (t) by stock

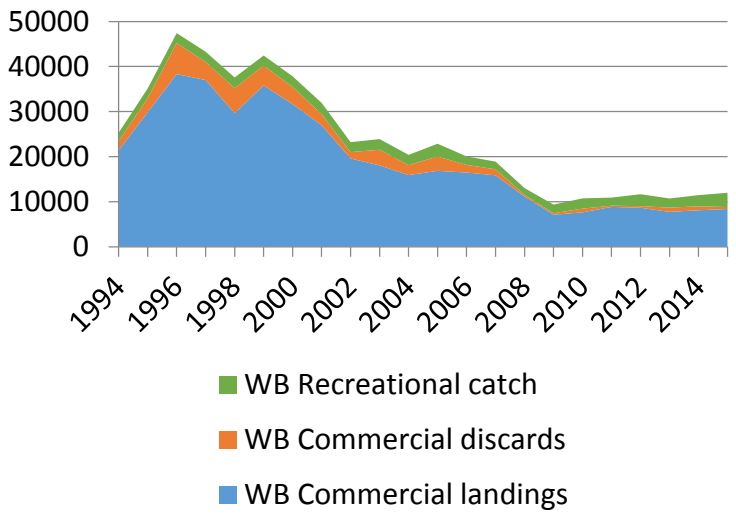


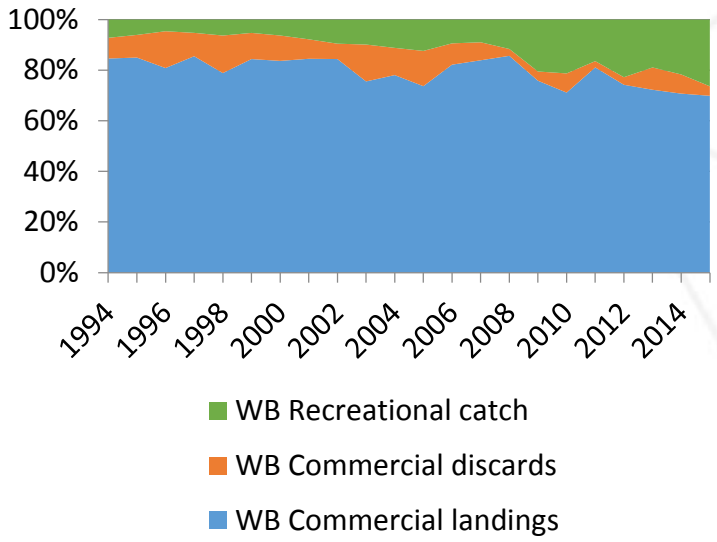
Baltic Sea – Stock size and exploitation

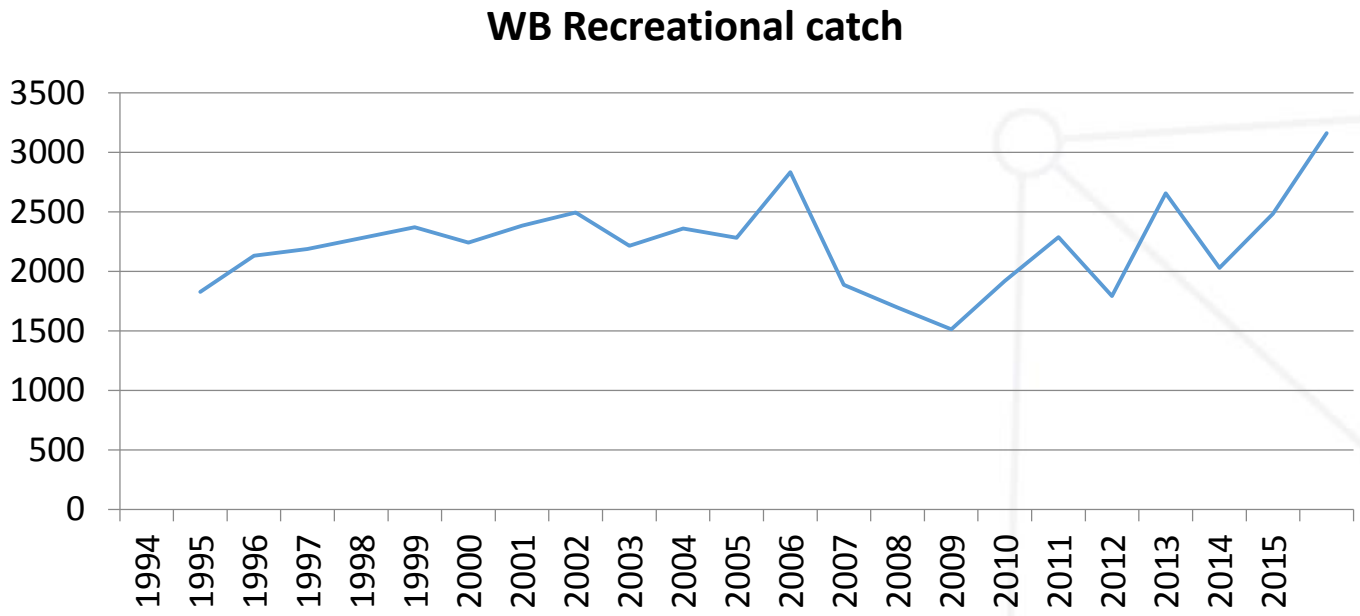
Science for sustainable seas

Baltic Sea – Western cod stock

Science for sustainable seas





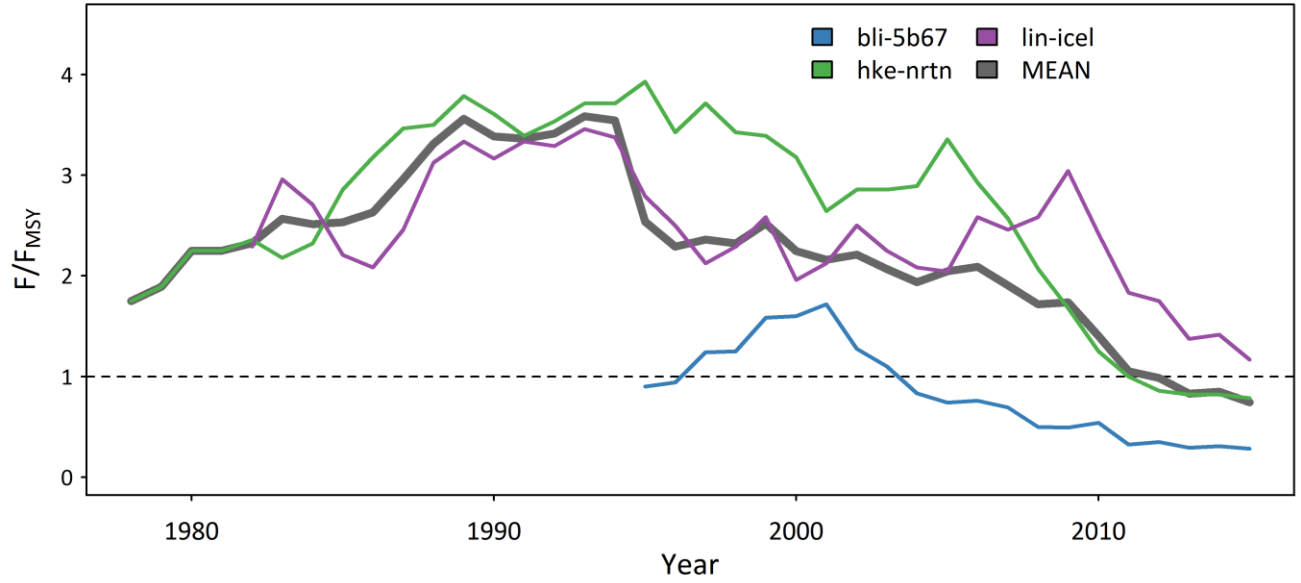


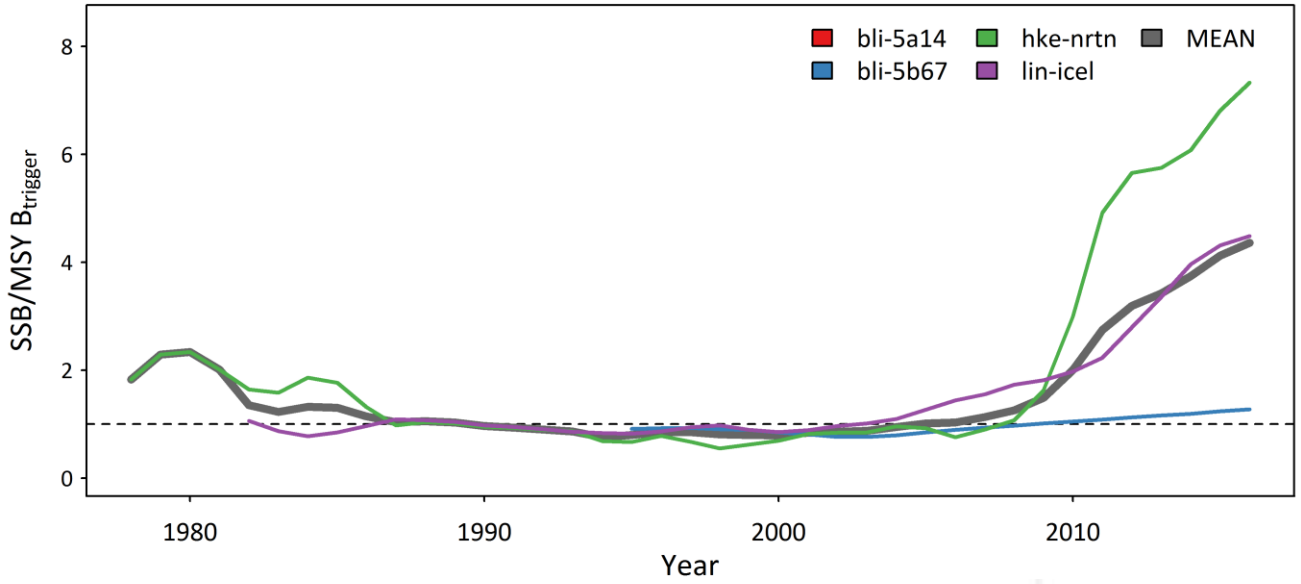
Total catch advice for 2017: 3475 t
Expected recreational catches: 2558 t
Commercial catches: 917 t

Western Baltic cod – Recreational catches - Advice

Science for sustainable seas

Widely distributed and migratory stocks





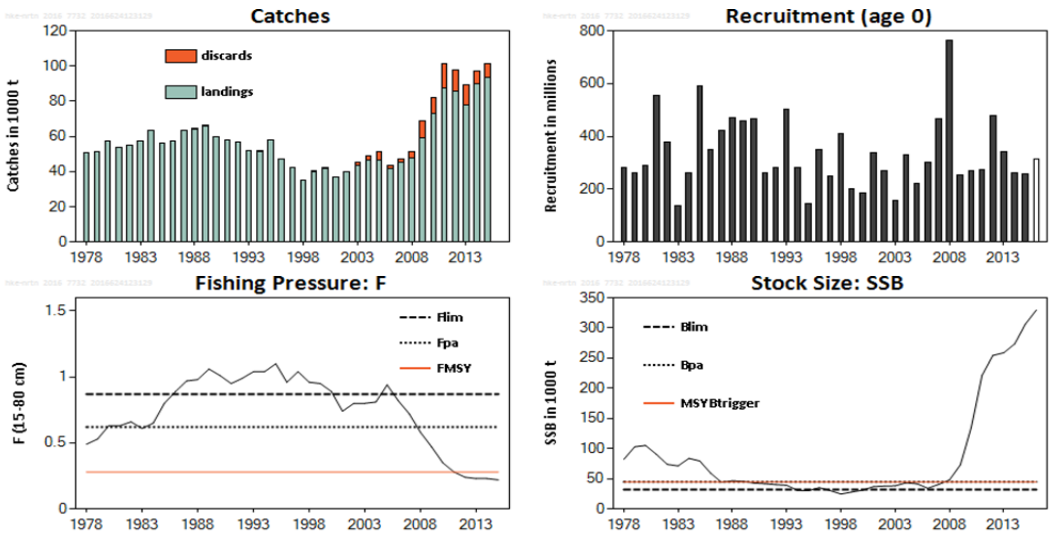
Blue ling Celtic Seas, English Channel, and Faroes grounds
Ling Iceland
Northern hake

Widely distributed and migrtory stocks

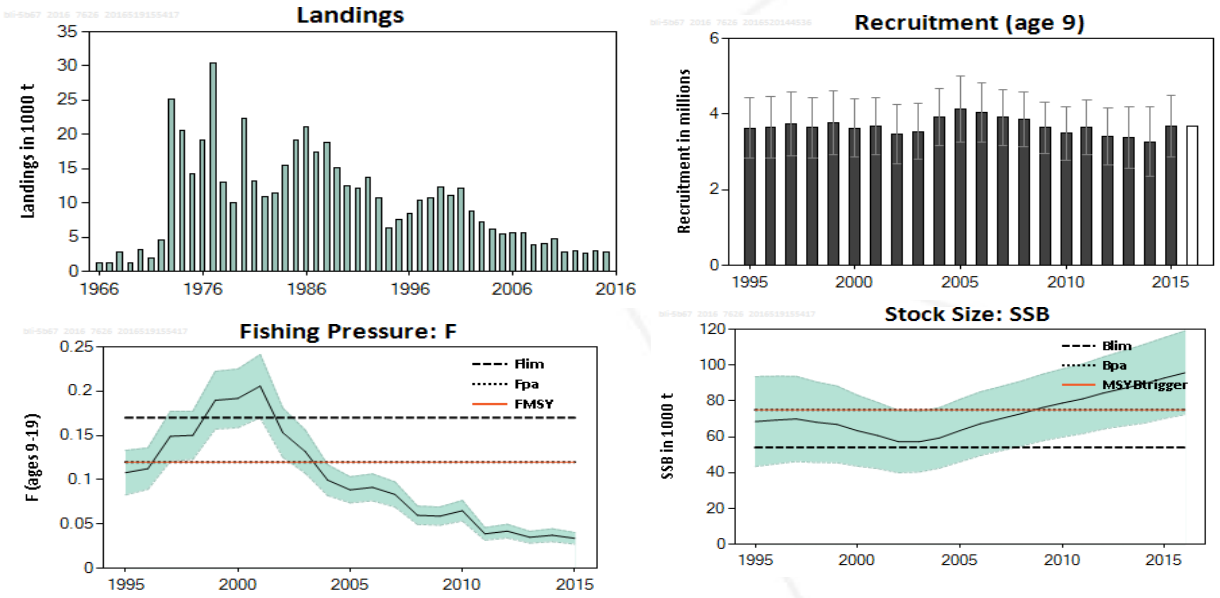
Science for sustainable seas

- Fishing mortalities have declined
- Stocks are increasing

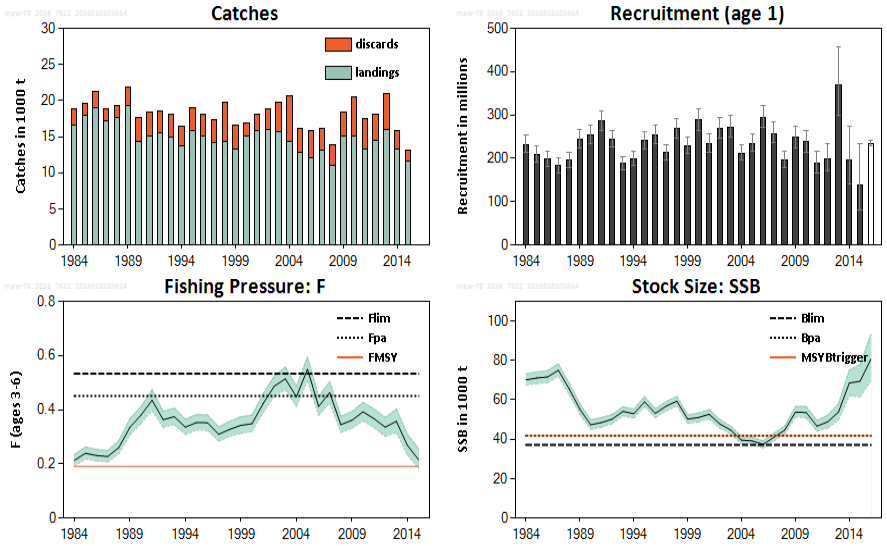
General trend in stock size and exploitation



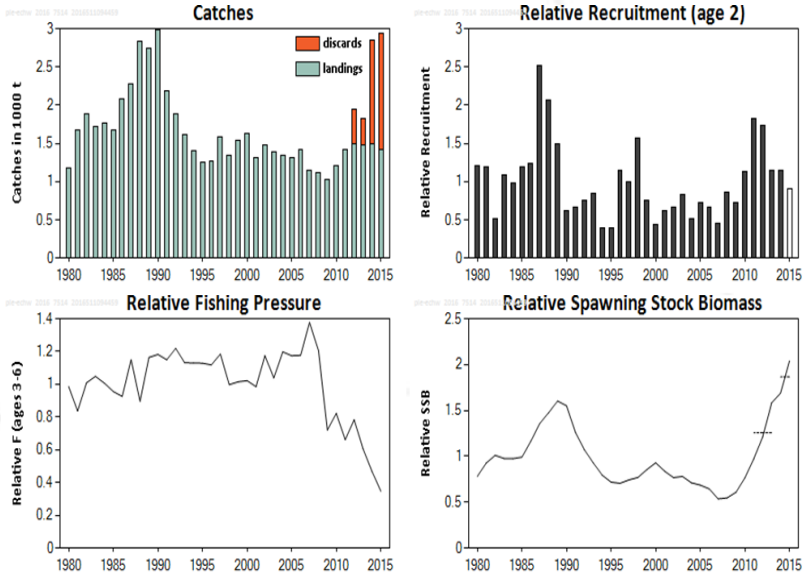
Northern hake



Blue ling Celtic Seas, English Channel, and Faroes grounds



Megrim 7-8



Plaice western English Channel

Thank you