

Seafish Common Language group: Demersal stock status December 2022

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Together we are working for
a sustainable blue future

Advisory changes in 2022

ICES new data-limited advice rules

Enhanced process for stocks with biomass trajectories

RFB (Ratio, F , Biomass safeguard)

CHR (Constant Harvest Rate)

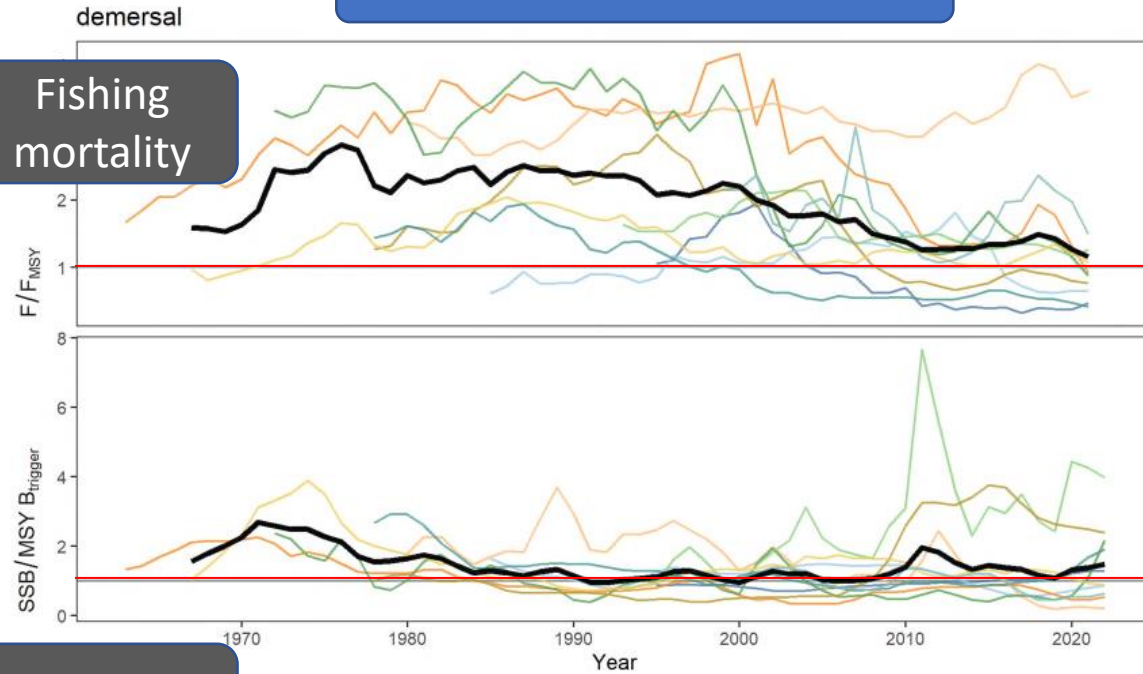
RB (Ratio, Biomass safeguard)

Suspension of Russian Federation from ICES

Affected advice for arctic

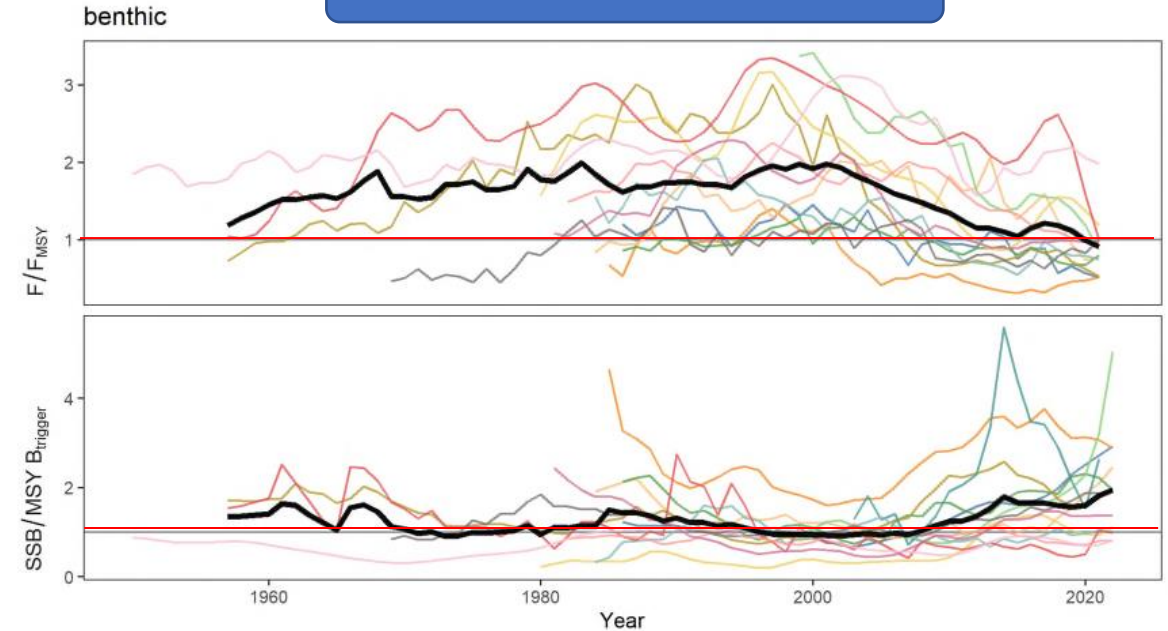
General trends: North Sea

Demersal



ICES Stock Assessment Database, October/2022. ICES, Copenhagen

Benthic



ank.27.78abd mon.27.78abd ple.27.7e sol.27.7e MEAN
dab.27.3a4 ple.27.21-23 sol.27.20-24 tur.27.3a
lez.27.4a6a ple.27.420 sol.27.4 tur.27.4
meg.27.7b-k8abd ple.27.7d sol.27.7d wit.27.3a47d

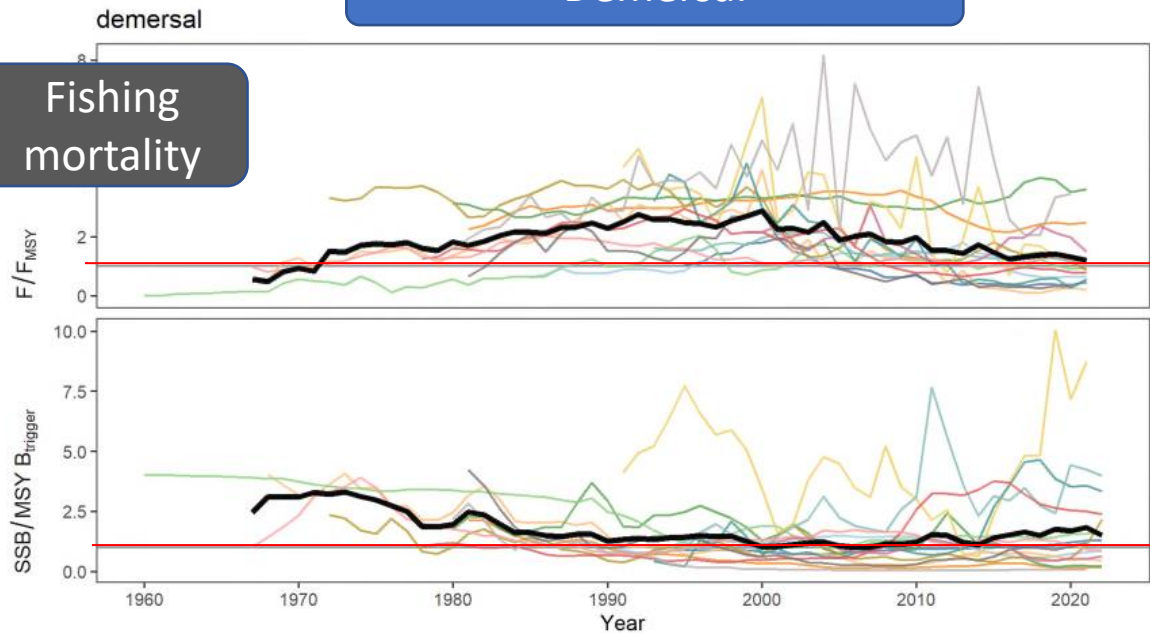
ICES Stock Assessment Database, October/2022. ICES, Copenhagen

Fishing mortality generally decreasing
Biomasses generally increasing

General trends: Celtic Seas

Demersal

Fishing mortality

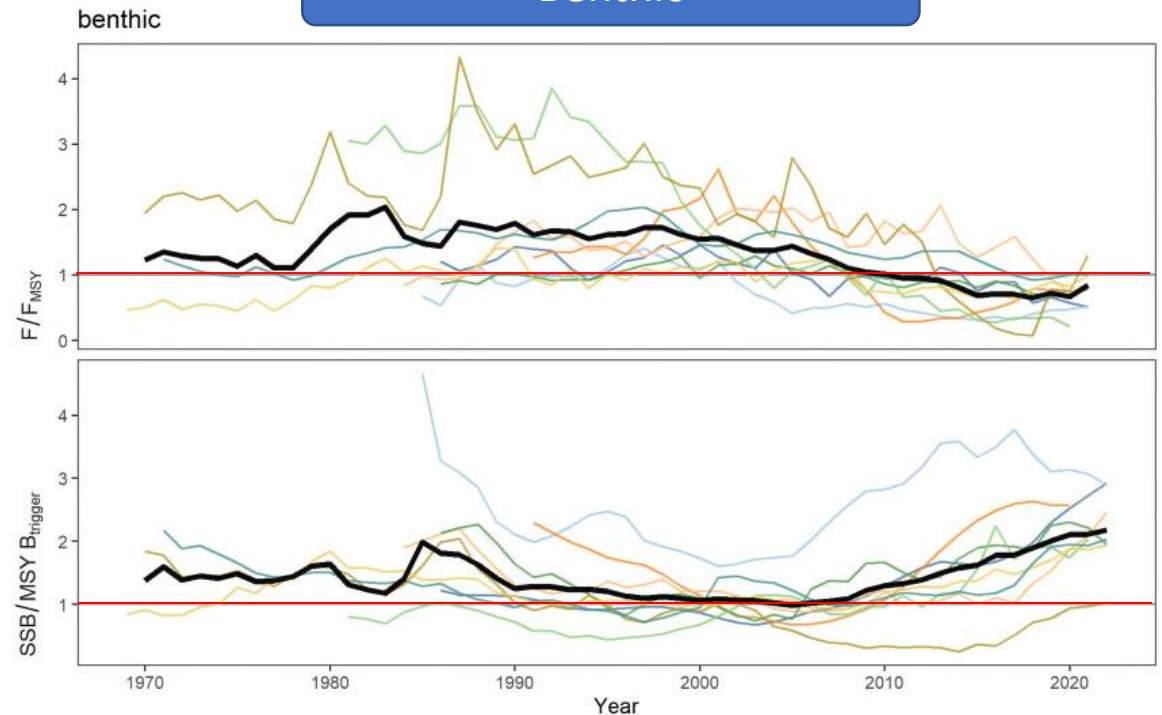


Biomass



ICES Stock Assessment Database, October/2022. ICES, Copenhagen

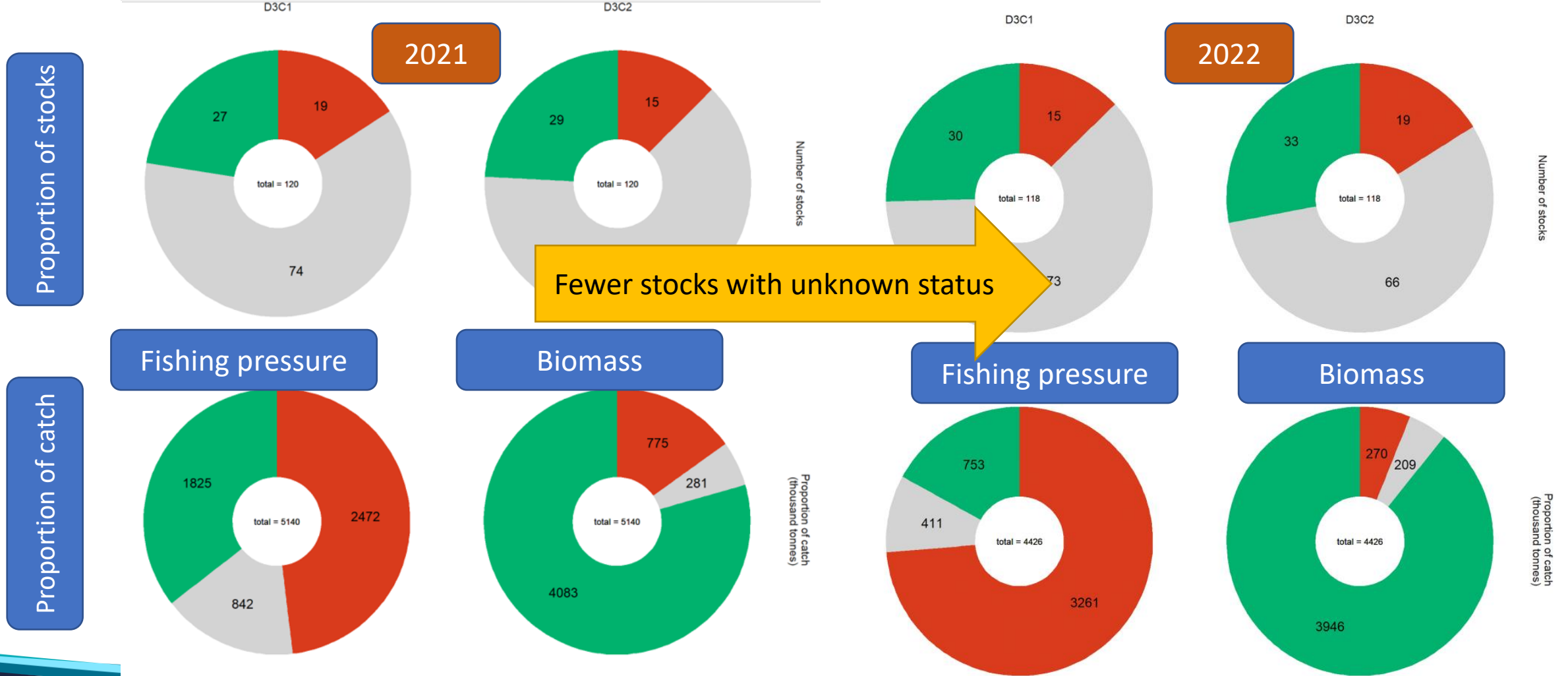
Benthic



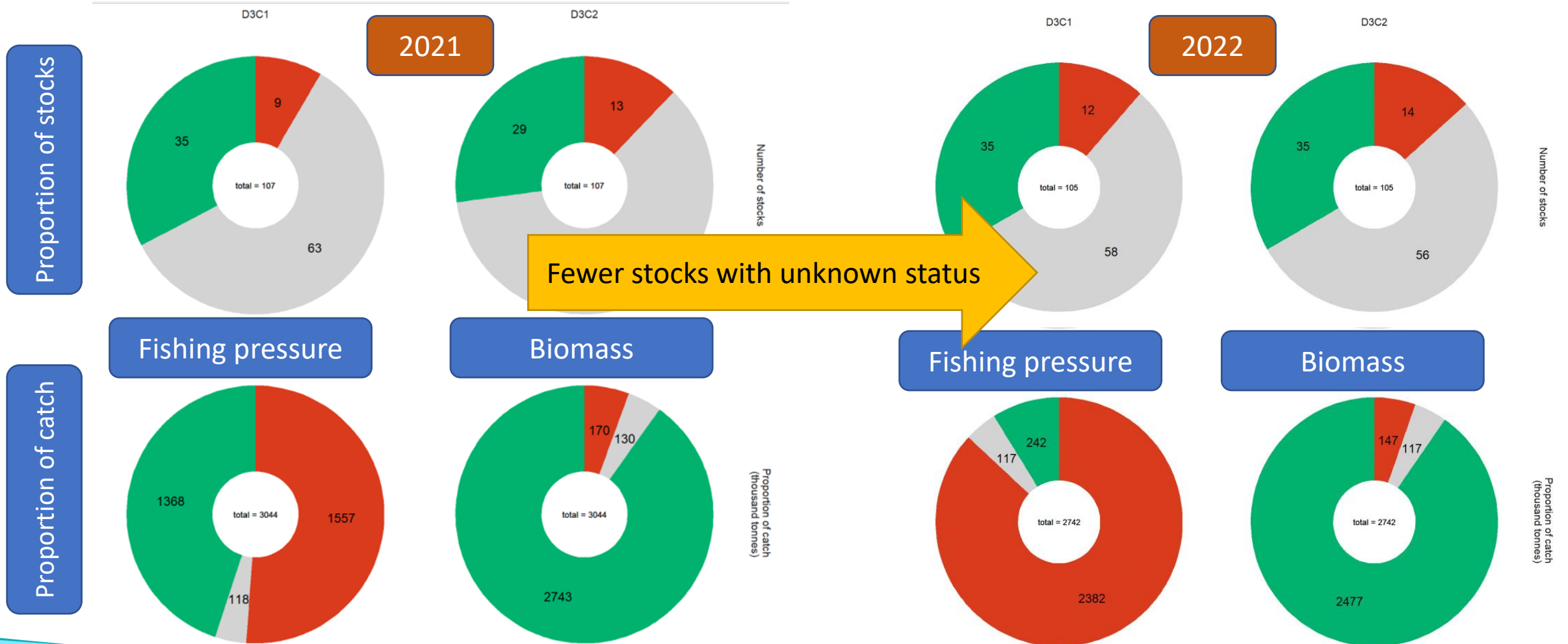
ICES Stock Assessment Database, October/2022. ICES, Copenhagen

Fishing mortality generally decreasing
Biomasses generally increasing

MSFD indicators: North Sea



MSFD indicators: Celtic Seas

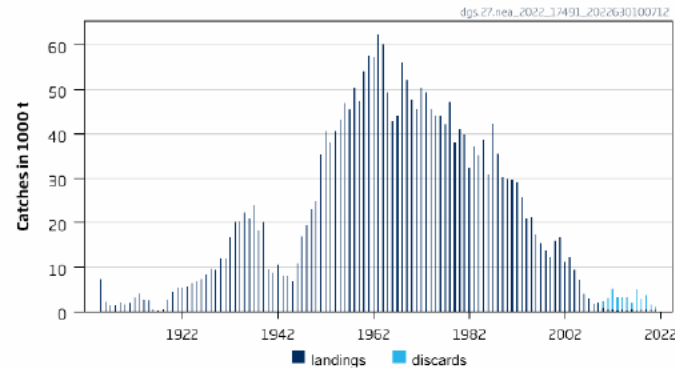


Some Highlights *(and lowlights)*

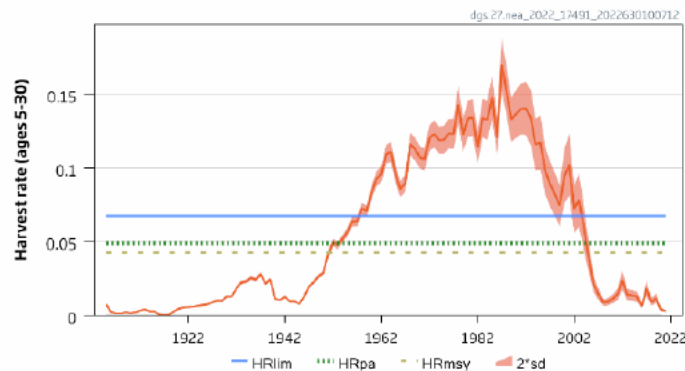


Spurdog NE Atlantic

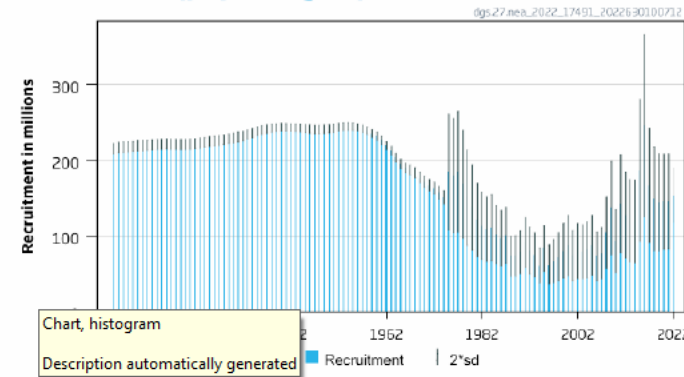
Catches



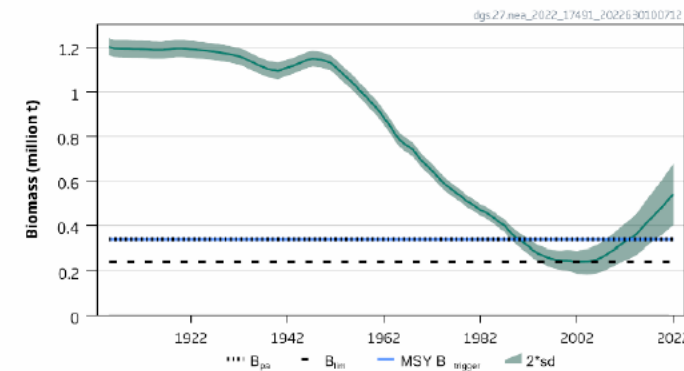
Harvest Rate



Recruitment (pups at age 0)



Total Biomass

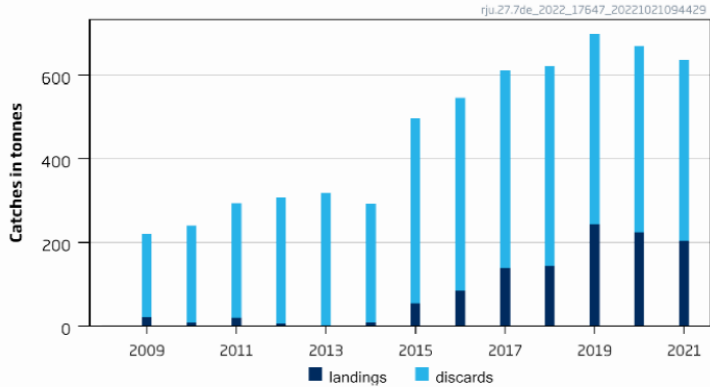


- Previous advice, “no targeted fisheries”
- Low bycatch TAC set (270t)
- Benchmark assessment.
 - Additional surveys
 - Updated fecundity data
 - More pups at low stock size
- Continues impression of increasing stock
- Reference points changed
- Advice for catches <17,353t
- Landings currently prohibited with exemption for some bycatches

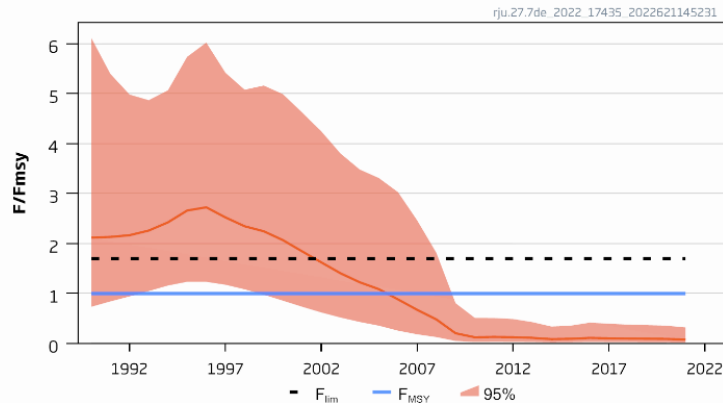


Undulate ray in 7de (English Channel)

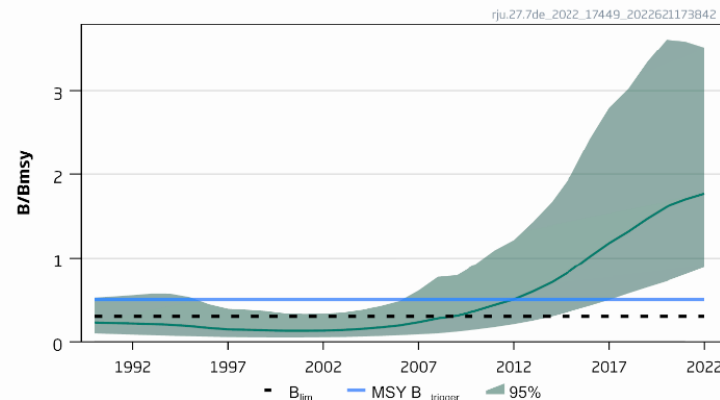
Catches



Relative fishing pressure



Biomass Index

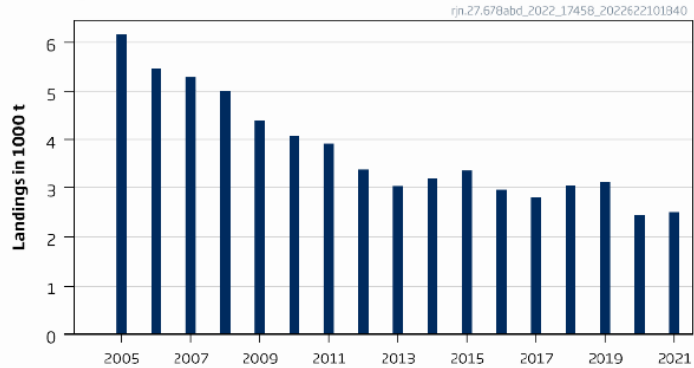


- New assessment.
 - Previously data limited methods
 - Now analytical (biomass-dynamic)
- Increase in survey abundance over 10 years
- Advice increased from 183t to 4386t
- >2000%!

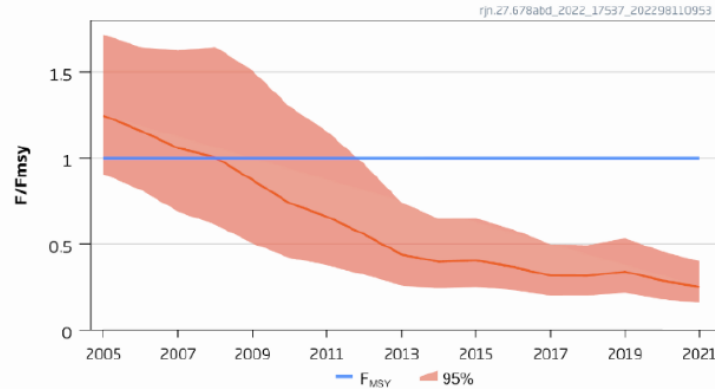


Cuckoo ray in 6,7,8abd

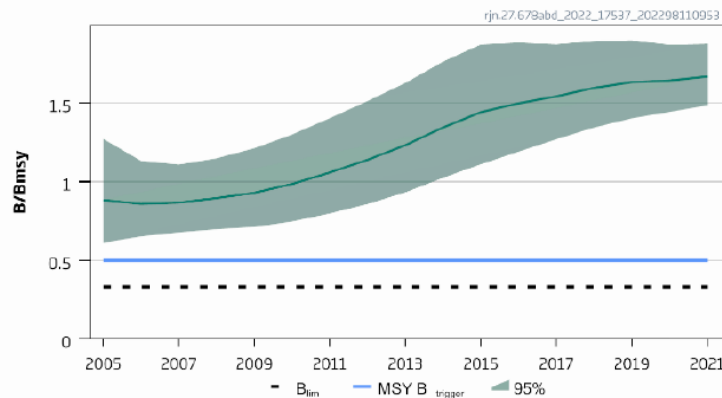
Landings



Relative fishing pressure



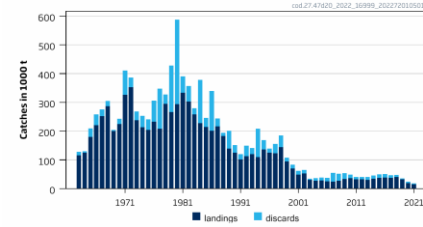
Relative biomass



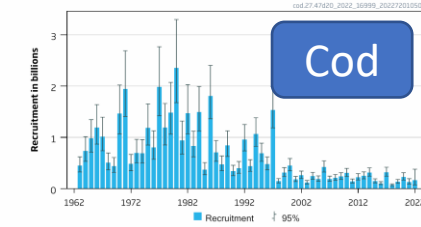
- New assessment – same as undulate ray in 7de.
- Advice increased from 3150t to 7826t (~150%)
- Part of the Group TAC - SRX/67AKXD

North Sea Demersals, a mixed bag

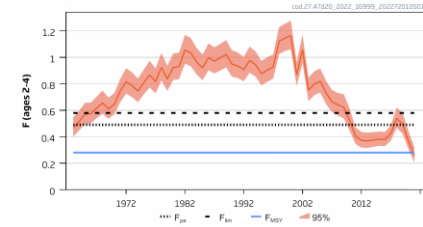
Catches



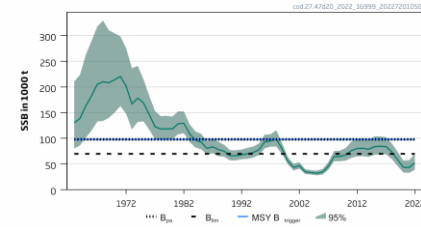
Recruitment (age 1)



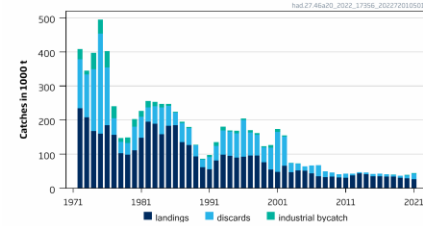
Fishing pressure



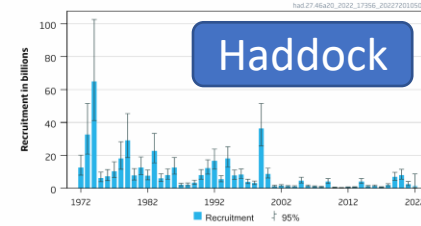
Spawning Stock Biomass



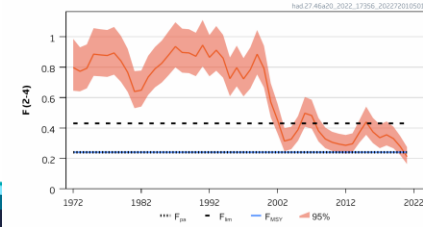
Catches



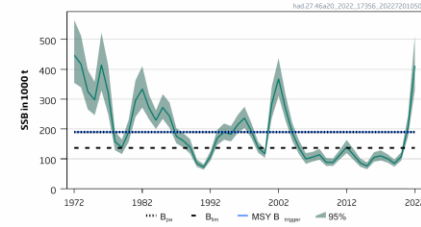
Recruitment (age 0)



Fishing pressure



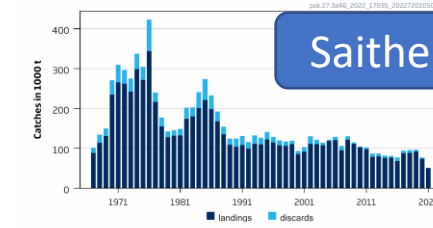
Spawning Stock Biomass



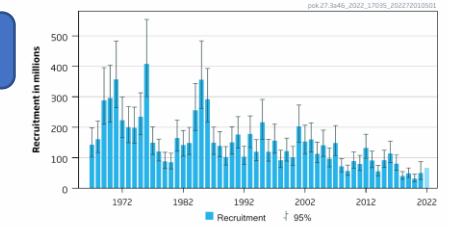
- Cod recruitment cod remains poor, stock size low but projected increase with decreased F.
- Saithe recruitment declining, F steady so stock declining

- Haddock relatively low recruitment 2019 & 2020 recruitments larger, F low, stock increasing rapidly
- Whiting, low F, recruitment steady, SSB increasing

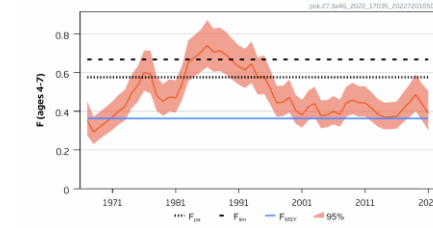
Catches



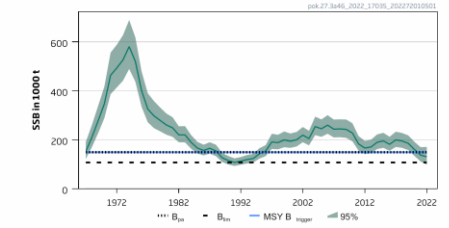
Recruitment (age 3)



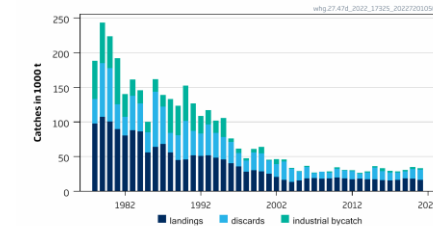
F



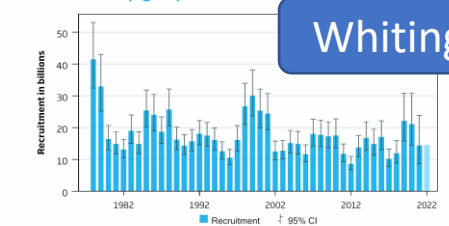
Spawning Stock Biomass



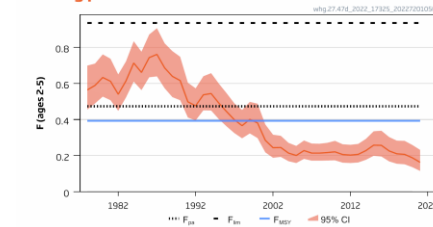
Catches



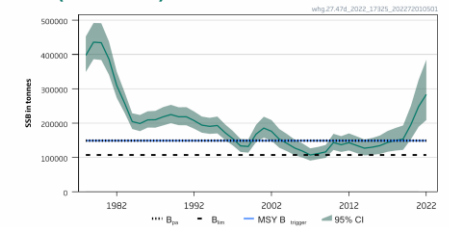
Recruitment (age 0)



Fishing pressure

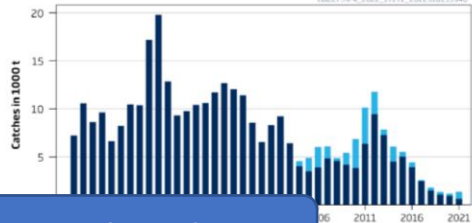


SSB ('000 tonnes)



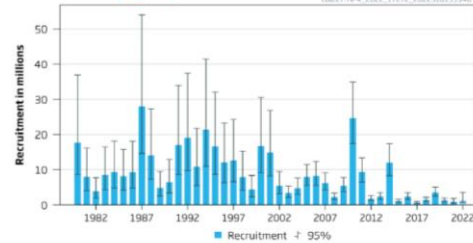
Celtic Sea Demersals

Catches

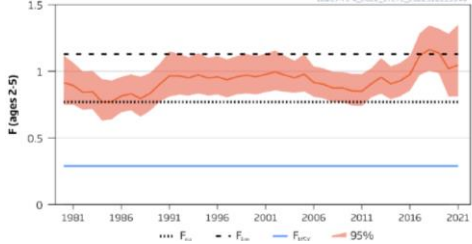


Cod 7e-k

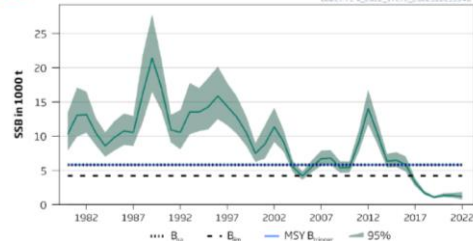
Recruitment (age 1)



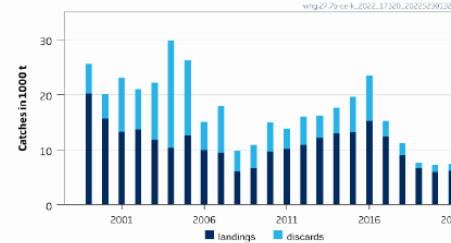
F



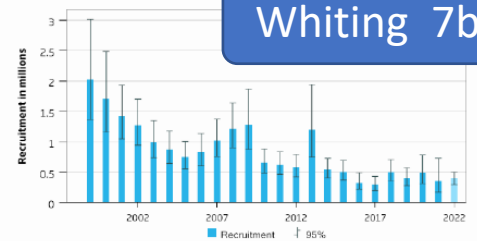
SSB



Catches

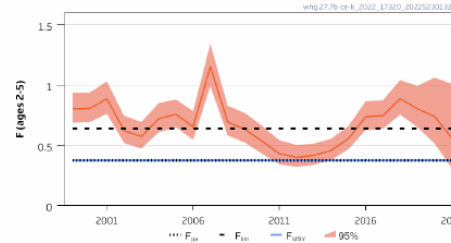


Recruitment (age 0)

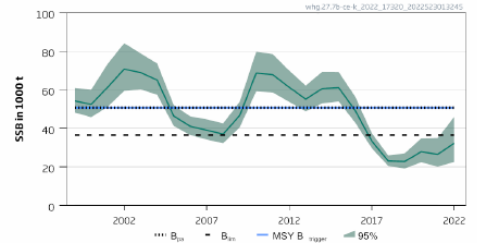


Whiting 7bc,e-k

F

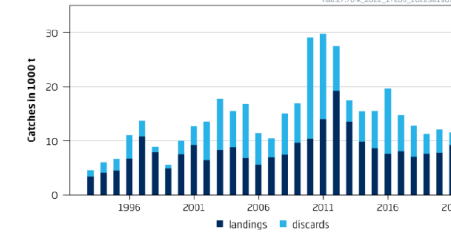


SSB

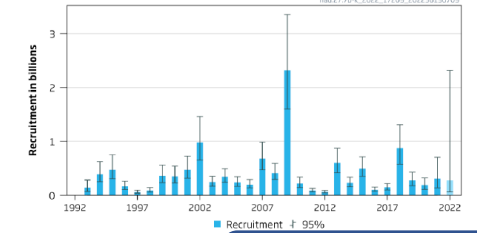


Cod very depleted, low recruitment, high F
Whiting, low SSB, low recruitment, high F

Catches

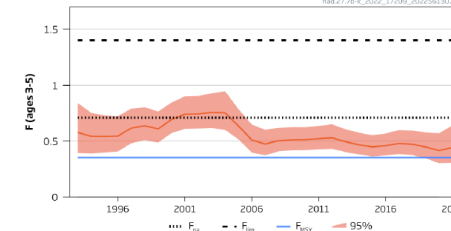


Recruitment (age 0)

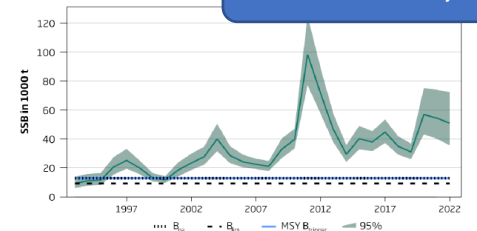


Haddock, 7b-k

F



SSB



Haddock, large SSB, ok recruitment, F just above Fmsy.



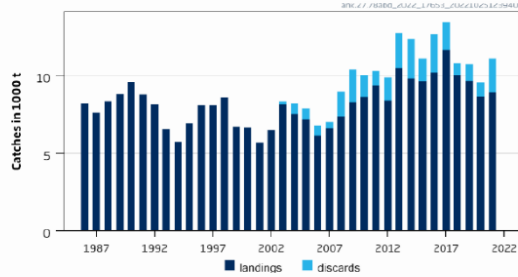
Centre for Environment
Fisheries & Aquaculture
Science



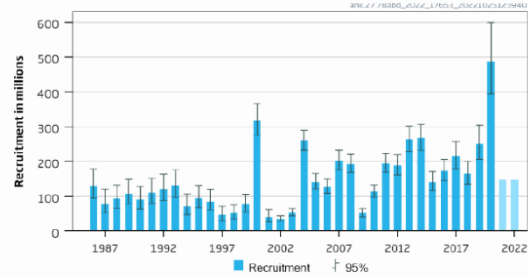
Cefas

Celtic Sea Benthic

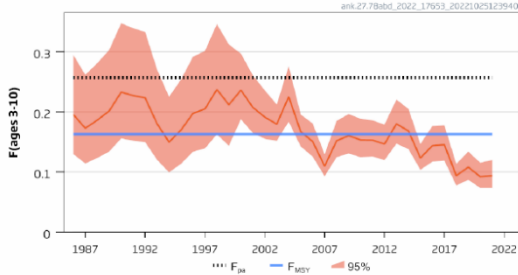
Catches



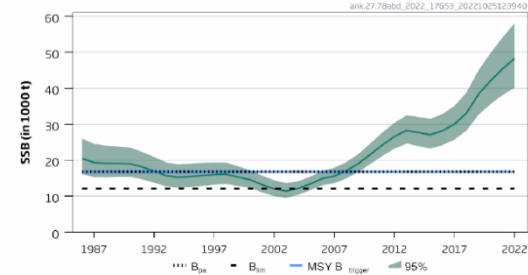
Recruitment (age 0)



F



SSB

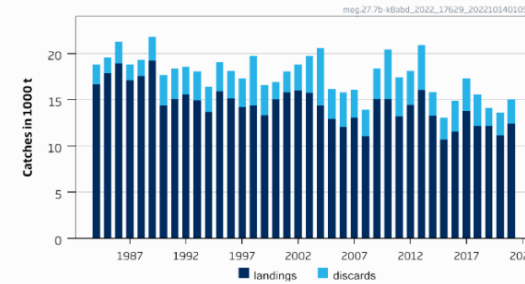


Black-bellied anglerfish 78abd

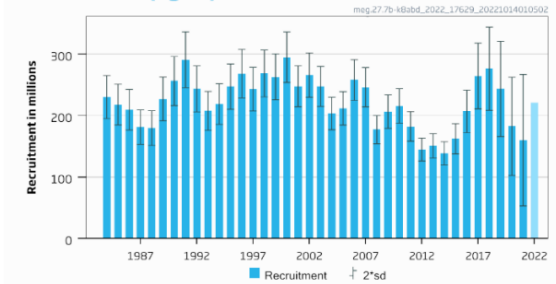
Management challenge:
Catch benthic species whilst avoiding cod & whiting

Megrim (*wiffiagonis*) 7b-k, 8abd

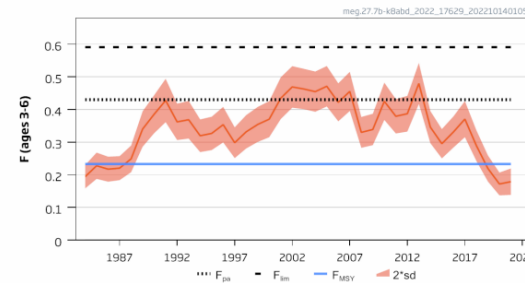
Catches



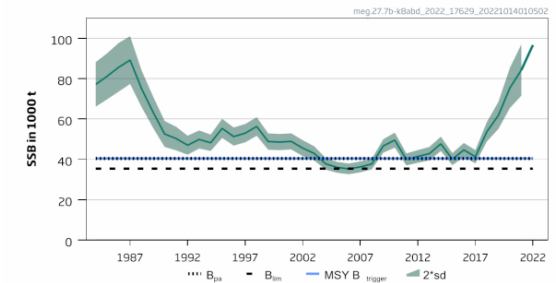
Recruitment (age 1)



F



SSB



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Science



Cefas