

# ICES advice for North Western Waters stocks for 2023

NWWAC meeting, July 3, 2023

IRISH SEA

Joanne Morgan  
ICES ACOM vice-chair

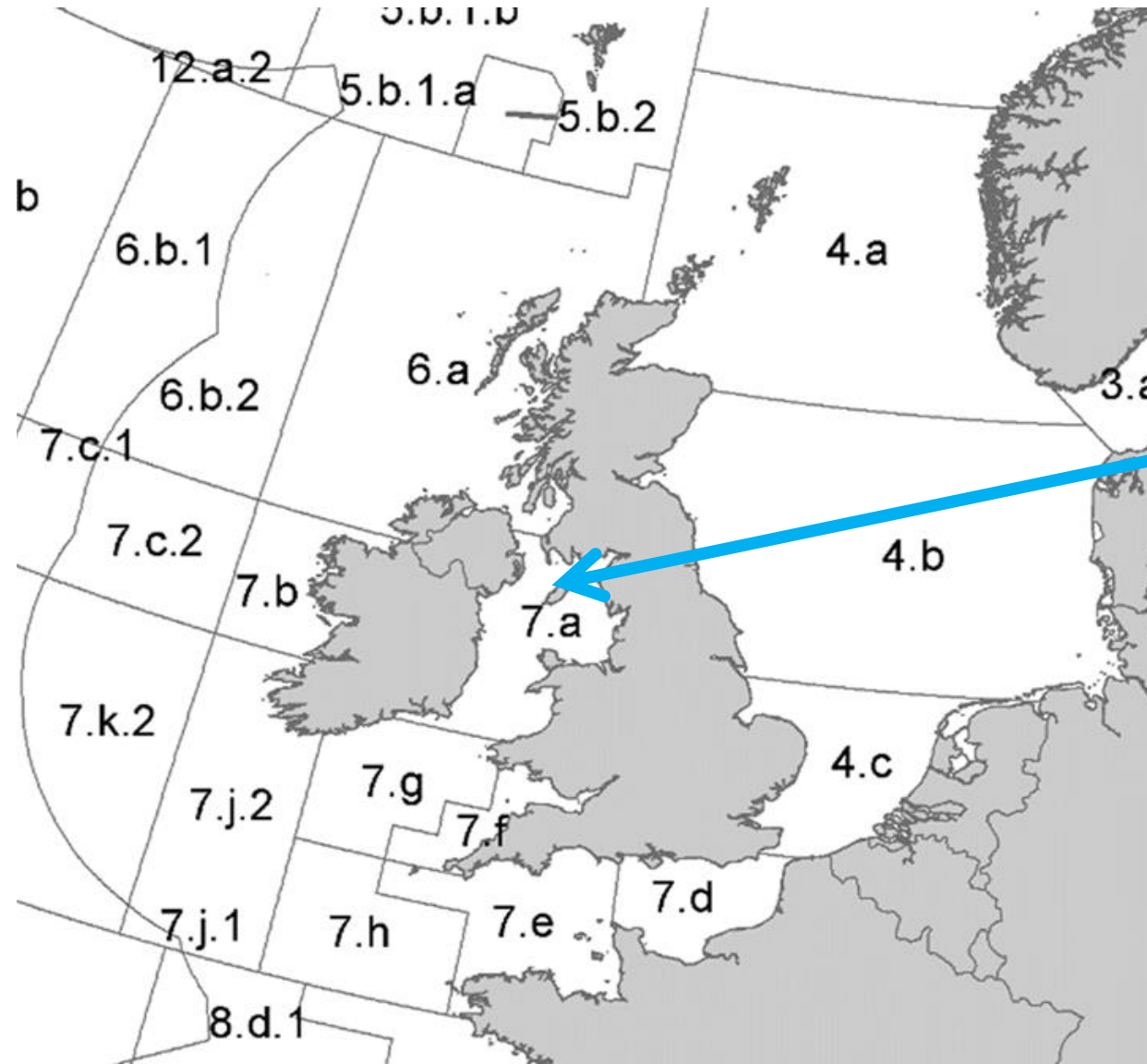


Image Dirk Vonten, Fotolia

## Introduction – Irish Sea

- Includes advice released up to 30 June 2023.
- Stocks managed by EU and UK: advice provided on the basis of MSY or PA but EU MAP option provided in catch scenario table if available.
- Any changes to advice rules documented in sheets.
- Advice for Nephrops, elasmobranchs and **cod 7a** released in autumn

# Irish Sea (7.a)



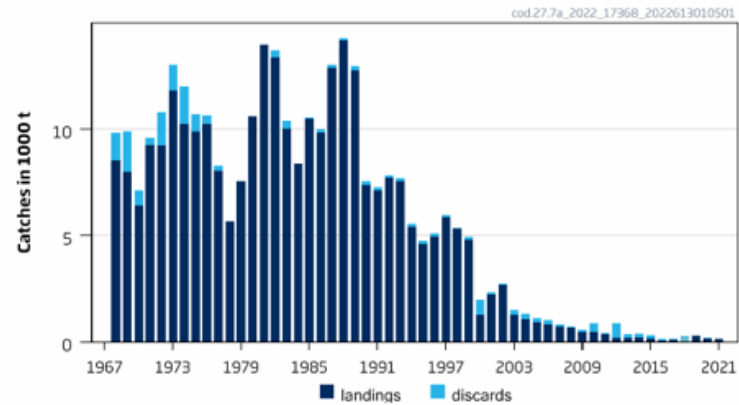
- Cod
  - Haddock
  - Sole
  - Plaice
  - Seabass
  - Whiting (advice from 2021)
- IN AUTUMN:**
- Nephrops (FUs 14-15-19)
  - Rays and skates
  - Spurdog



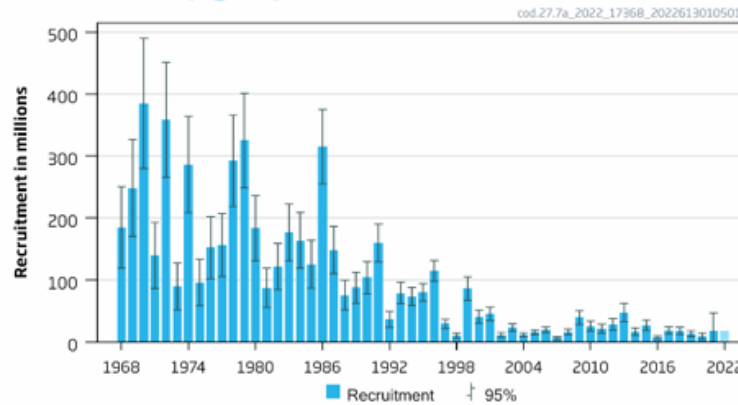
# Cod in the Irish Sea (7.a)

**Advice for 2023, MSY: Catch 0 t** Advice delayed – no update

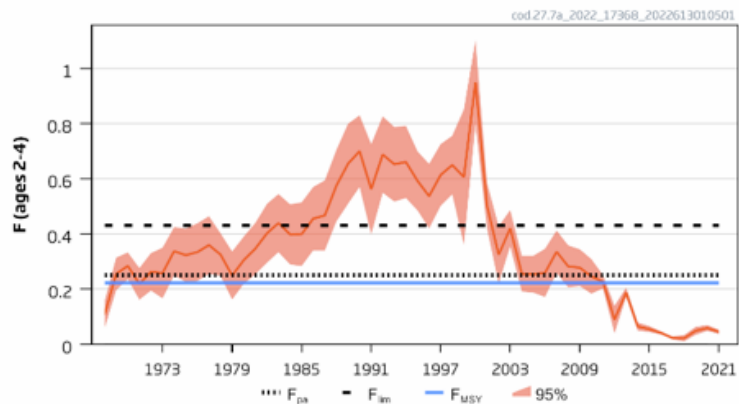
Catches



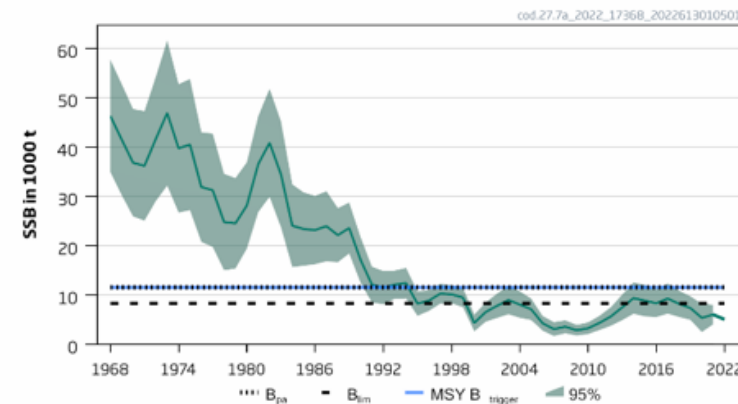
Recruitment (age 0)



F



SSB

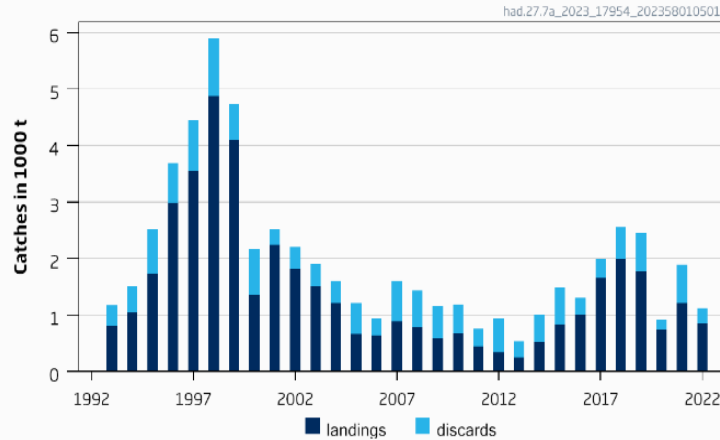


Advice delayed til autumn to allow time to examine assessment issues

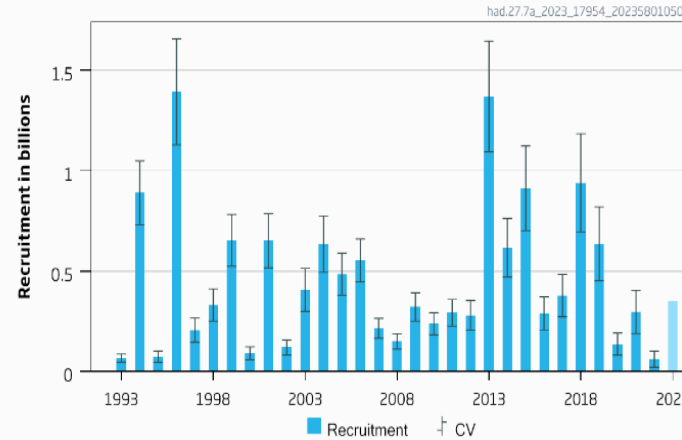
# Haddock in the Irish Sea (7.a)

**Advice for 2024, MSY:** Catch:  $\leq 2\,263$  t 14.5% decrease advice

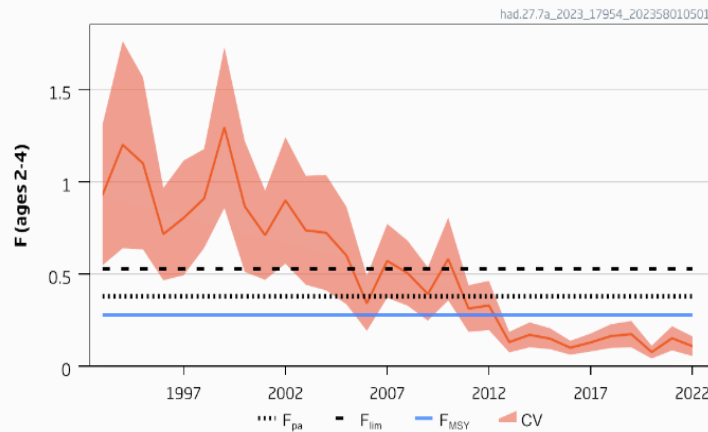
Catches



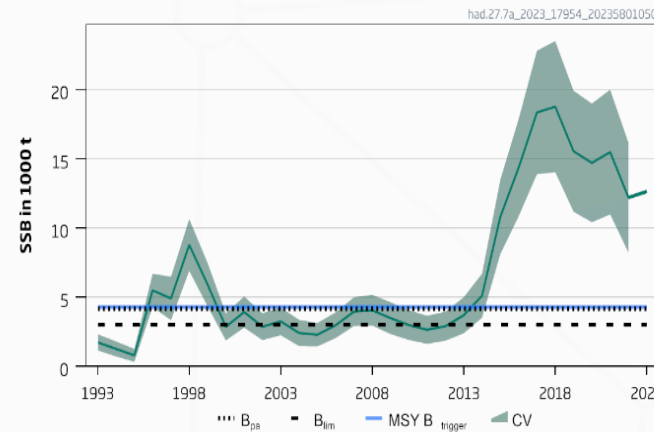
Recruitment (age 0)



F



SSB



- Spawning stock high in 2022 but declining: above MSY Btrigger
- F fairly stable since early 2000's: below  $F_{MSY}$
- Poor recruitment in 2020 and 2021 impacting stock
- Decrease advice: lower stock size, 2022 recruits revised downwards (retrospective)

**EU MAP :** Catch: 1671 – 2749 t ( $F_{MSY}$ : 2263 t)

# Haddock in the Irish Sea (7.a)

**Catch (2021) : 1196 t (29% discards)**

**F(2023) = 0.148 (Average F<sub>2019-2022</sub> excluding 2020 - sampling);**

**SSB (2024)= 9 888 t > MSY<sub>Btrigger</sub> (4 281 t) F<sub>MSY</sub>= 0.28**



Basis	Total catch (2024)	Projected landings (2024)	Projected discards (2024)	F <sub>total</sub> (2024)	F <sub>projected</sub> landings (2024)	F <sub>projected</sub> discards (2024)	SSB (2025)	% SSB change*	% advice change**
ICES advice basis									
MSY approach: F <sub>MSY</sub>	2263	1807	456	0.28	0.162	0.118	7073	-28	-14.5
Other scenarios									
EU MAP***: F <sub>MSY</sub>	2263	1807	456	0.28	0.162	0.118	7073	-28	-14.5
EU MAP*** F <sub>MSY</sub> lower	1671	1338	333	0.20	0.116	0.084	7613	-23	-37
EU MAP*** F <sub>MSY</sub> upper	2749	2191	558	0.35	0.20	0.147	6633	-33	3.8
F = 0	0	0	0	0.000	0.000	0.000	9159	-7.4	-100
F = F <sub>pa</sub>	3143	2500	643	0.41	0.24	0.172	6278	-37	18.7
F = F <sub>lim</sub>	3698	2934	764	0.50	0.29	0.21	5783	-42	40
SSB <sub>2025</sub> = B <sub>lim</sub>	6974	5413	1561	1.23	0.72	0.52	2994	-70	163
SSB <sub>2025</sub> = B <sub>pa</sub>	5565	4367	1198	0.86	0.50	0.36	4160	-58	110
SSB <sub>2025</sub> = SSB <sub>2024</sub> <sup>^</sup>									
SSB <sub>2025</sub> = MSY B <sub>trigger</sub>	5422	4259	1163	0.83	0.48	0.35	4281	-57	105
F = F <sub>2023</sub>	1266	1015	251	0.148	0.086	0.062	7985	-19.2	-52

ASAP model (NOAA)

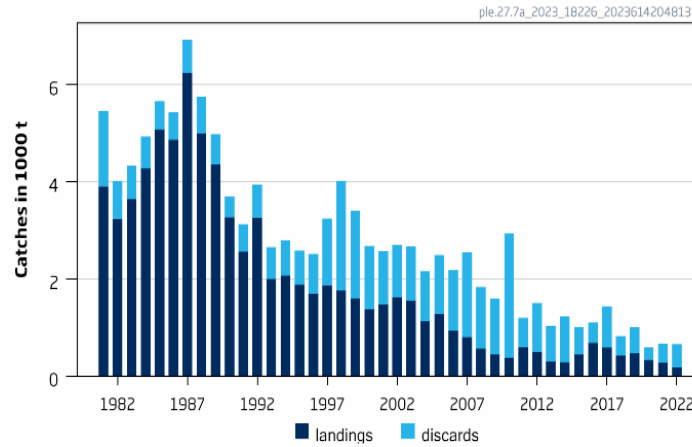
NIMIK survey not available 2022, and lower sampling some fleets – minimal impact

Landings from south of Division 7.a (rectangles 33E2-3) are not considered part of this stock

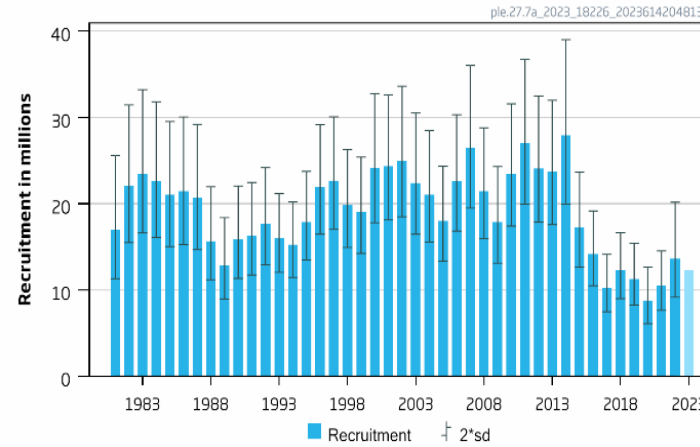
# Plaice in the Irish Sea (7.a)

**Advice for 2024, MSY:** Catch  $\leq 1\,902$  t -6.7%

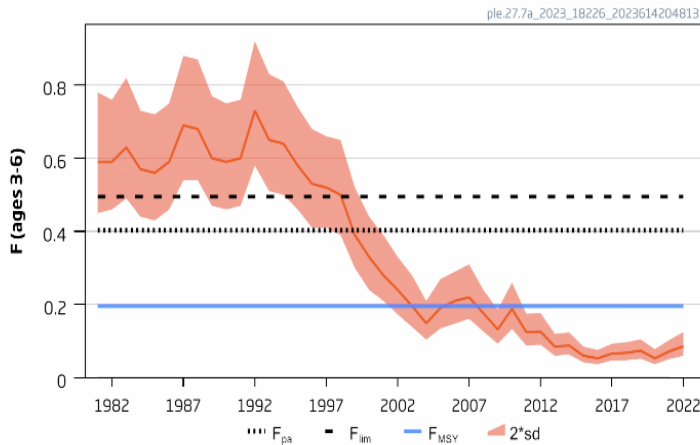
Catches



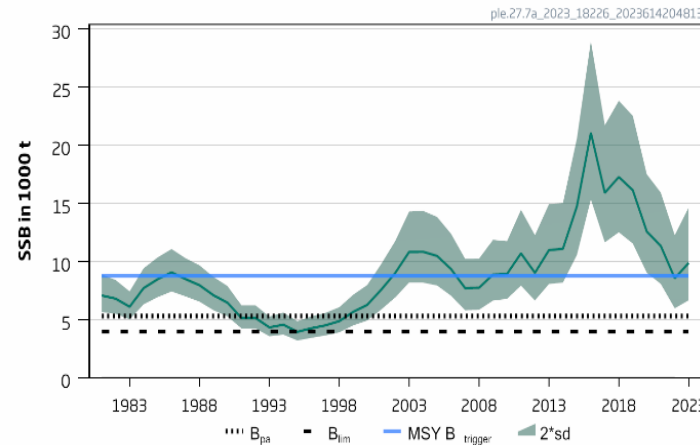
Recruitment (age 1)



F



SSB



- SSB just above MSY  $B_{trigger}$ .
- Fishing pressure below  $F_{MSY}$  since 2011 but increasing
- Recruitment lower since 2016.
- Discarding high and variable, 40% assumed to survive.
- Decreased advice: declining stock size and downward revision (retrospective)

# Plaice in the Irish Sea (7.a)

Catch (2022) : 663 t (62 % discards, but 40% of these esimated to survive)

F(2023) = 0.071 (Average F<sub>2020-2022</sub> )

SSB (2024)= 10583t > MSY<sub>Btrigger</sub> (8757t) F<sub>MSY</sub> = 0.196



Basis	Total catch (2024)	Projected landings (2024)	Projected Surviving discards (2024)	Projected dead discards (2024)	Total projected discards* (2024)	F <sub>total</sub> (2024)	F <sub>projected</sub> landings (2024)	F <sub>projected</sub> discards** (2024)	SSB (2025)	% SSB change ***	% advice change ^
ICES advice basis											
MSY approach: F= F <sub>MSY</sub>	1902	769	453	680	1133	0.196	0.055	0.141	10054	-5	-6.7
Other scenarios											
F= F <sub>MSY lower</sub>	1323	535	315	473	788	0.133	0.037	0.096	10526	-0.53	-35
F= F <sub>MSY upper</sub>	2748	1111	655	982	1637	0.29	0.082	0.21	9404	-11.1	35
F= F <sub>pa</sub>	3623	1465	863	1295	2158	0.4	0.112	0.29	8674	-18	78
F = 0	0	0	0	0	0	0	0	0	11538	9	-100
F = F <sub>lim</sub>	4308	1742	1026	1540	2566	0.5	0.138	0.36	8196	-23	111
SSB <sub>2025</sub> = B <sub>lim</sub>	12607	5099	3003	4505	7508	3	0.84	2.2	2064	-80	520
SSB <sub>2025</sub> = B <sub>pa</sub>	8330	3369	1985	2977	4961	1.23	0.34	0.88	5294	-50	310
SSB <sub>2025</sub> = MSY B <sub>trigger</sub>	3539	1431	843	1265	2108	0.39	0.109	0.28	8757	-17.3	74
Rollover advice	2039	825	486	729	1214	0.21	0.059	0.152	9962	-5.9	0
F = F <sub>2023</sub>	720	291	172	257	429	0.071	0.0197	0.051	10976	3.7	-65
SSB <sub>2025</sub> = SSB <sub>2024</sub>	1242	502	296	444	740	0.125	0.035	0.09	10583	0	-39

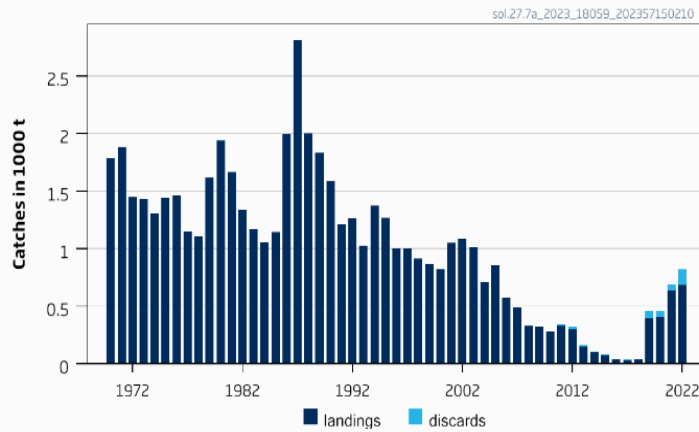
SAM  
assessment



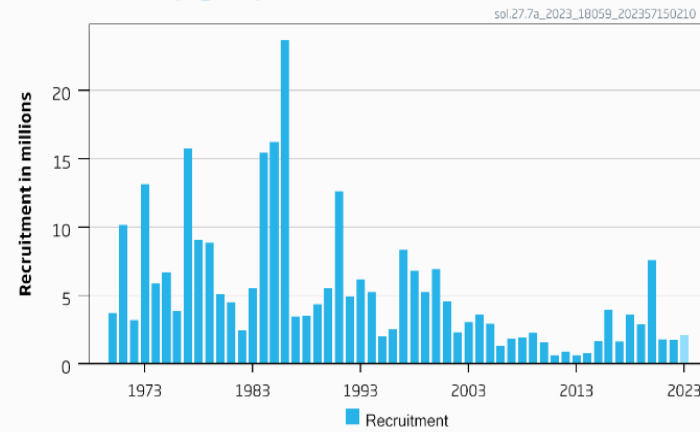
# Sole in the Irish Sea (7.a)

**Advice for 2024, MSY: zero catch**

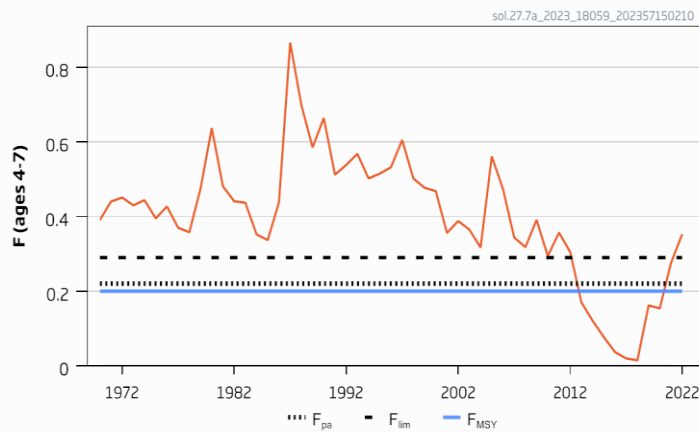
Catches



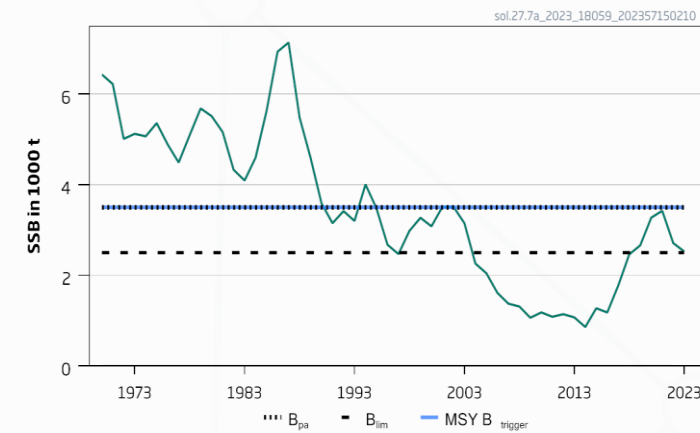
Recruitment (age 2)



F



SSB



- Catch increased over last 4 years
- F increasing and above  $F_{lim}$
- SSB was increasing but declined since 2021 and now below  $B_{pa}$
- Recruitment low in 2021-2022
- Stock size revised downwards (retrospective)
- No catch scenario will result in stock above  $B_{lim}$

# Sole in the Irish Sea (7.a)

**Catch (2022) : 818 t (16 % discards)**

**F(2023) = 0.261 (Fsq=average 2020-2022)**

**SSB (2024)= 2340 < MSY<sub>Btrigger</sub> (3 500) F<sub>MSY</sub>= 0.20**

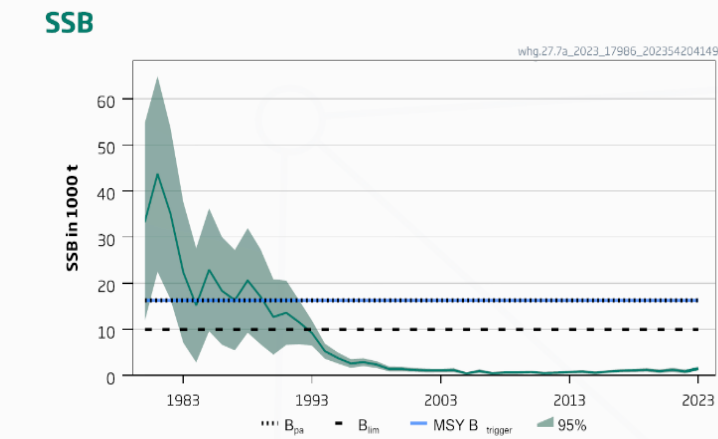
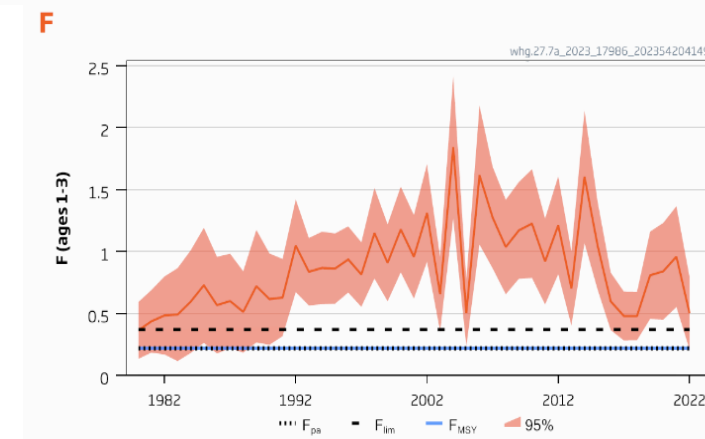
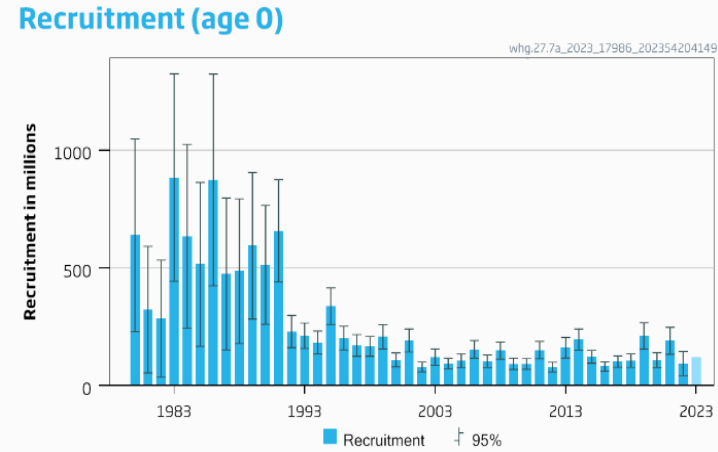
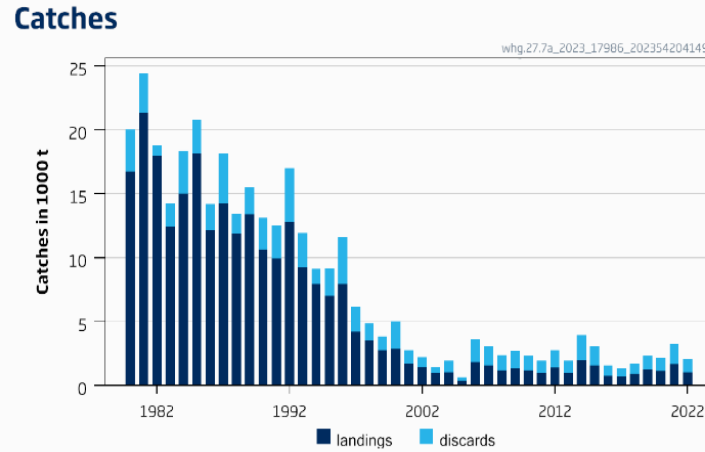
XSA  
assessment

Basis	Total catch * (2024)	Projected landings (2024)	Projected discards* (2024)	F <sub>projected landings</sub> (2024)	SSB (2025)	% SSB change**	% TAC change***	% advice change^
ICES advice basis								
MSY approach: F = 0	0	0	0	0	2677	14.4	-100	-100
Other scenarios								
F = F <sub>MSY</sub> × SSB <sub>2024</sub> /MSY B <sub>trigger</sub>	317	278	40	0.134	2400	2.5	-48	-48
F = F <sub>MSY lower</sub> × SSB <sub>2024</sub> /MSY B <sub>trigger</sub>	257	225	32	0.107	2452	4.8	-58	-58
F= F <sub>pa</sub>	502	440	63	0.22	2238	-4.4	-17.0	-17.0
F= F <sub>lim</sub>	641	561	80	0.29	2117	-9.5	6.0	6.0
SSB <sub>2025</sub> = B <sub>lim</sub>	203	177	25	0.083	2500	6.8	-67	-67
SSB <sub>2025</sub> = B <sub>pa</sub> = MSY B <sub>trigger</sub> ****								
SSB <sub>2025</sub> = SSB <sub>2024</sub>	385	337	48	0.165	2340	0	-36	-36
F= F <sub>2023</sub>	585	512	73	0.26	2166	-7.4	-3.3	-3.3
F= F <sub>MSY lower</sub>	375	328	47	0.16	2349	0.38	-38	-38
F= F <sub>MSY</sub>	461	403	57	0.20	2274	-2.8	-24	-24
F= F <sub>MSY upper</sub>	543	475	68	0.24	2203	-5.9	-10.3	-10.3

Benchmark planned

# Whiting in the Irish Sea (7.a)

**Advice for 2024 and 2025, MSY: Catch = 0 no change**



- Stock size is extremely low.
- Spawning-stock biomass (SSB) well below Blim since the mid-1990s.
- Recruitment has been low since the early 1990s.
- Fishing pressure (F) above  $F_{MSY}$  and  $F_{lim}$ .
- Discarding high; 97% in 2020 on catches of 1 118 t
- No NIMIK survey data and low discard sampling 2022 – minimal impact

# Whiting in the Irish Sea (7.a)

**Catch 2022: 1 043 t ( 95% discards)**

**F(2023)=0.77 (Fsq = average 2020-2022)**

**SSB(2024)=1096 < Blim (10 000 t) FMSY=0.22**

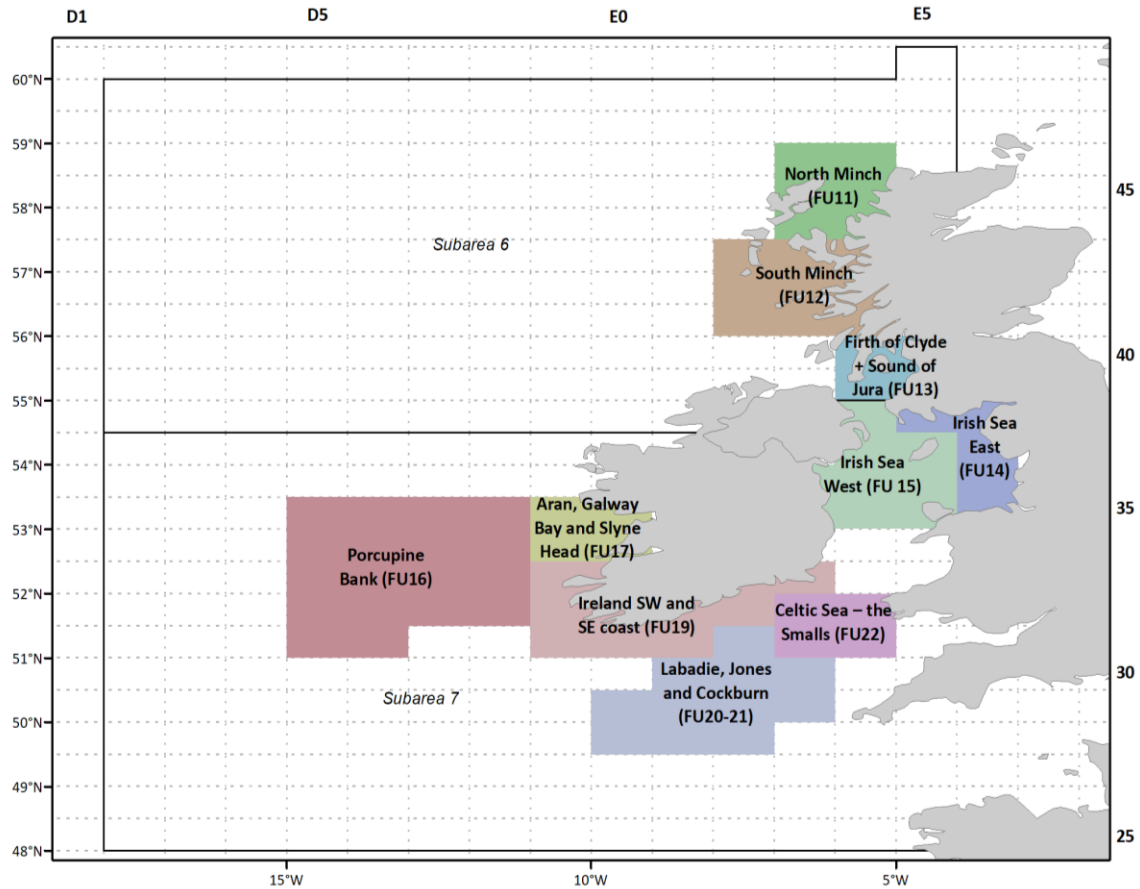
Basis	Total catch (2024)	Projected landings (2024)	Projected discards (2024)	F total (2024)	Fprojected landings (2024)	Fprojected discards (2024)	SSB (2025)	% SSB change*	% advice change^^
ICES advice basis									
MSY approach: F = 0	0	0	0	0	0	0	2111	93	-
Other scenarios									
FMSY = Fpa	457	115	342	0.22	0.035	0.184	1706	56	-
F = 0	0	0	0	0	0	0	2111	93	-
FMSY lower	338	85	252	0.158	0.025	0.133	1811	65	-
FMSY upper	457	115	342	0.22	0.035	0.184	1706	56	-
FMSY × SSB <sub>2024</sub> /MSY Btrigger	33	9	25	0.0147	0.0023	0.0124	2081	90	-
FMSY lower × SSB <sub>2024</sub> /MSY Btrigger	24	6	18	0.0106	0.00169	0.0089	2089	91	-
FMSY upper × SSB <sub>2024</sub> /MSY Btrigger	33	9	25	0.0147	0.0023	0.0124	2081	90	-
Flim	729	182	548	0.37	0.059	0.31	1474	34	-
SSB <sub>2025</sub> = Blim^									
SSB <sub>2025</sub> = Bpa = MSY Btrigger^									
SSB <sub>2025</sub> = SSB <sub>2024</sub>	1193	291	902	0.68	0.107	0.57	1096	0	-
SSB <sub>2025</sub> = SSB <sub>2024</sub> × 1.2	920	227	693	0.49	0.077	0.41	1315	20	-
F = F <sub>2023</sub>	1313	318	995	0.77	0.122	0.65	1003	-8.5	-

ASAP  
assessment  
(NOAA)

Assessment and the advice are for Division 7.a, excluding the rectangles 33E2 and 33E3



# Nephrops



FU	Advice for 2023	change	Basis
14 – Irish Sea, East	$\leq 798$ t	-5.5%	MSY
15 – Irish Sea, West	$\leq 11\,069$ t	-6.1%	MSY
19 – Irish Sea, Celtic Sea, eastern part of southwest Ireland	302-338 t	+14.3	MAP- ranges

management should be implemented at the FU level.

New advice released in autumn



**Thank you  
for your  
attention!**

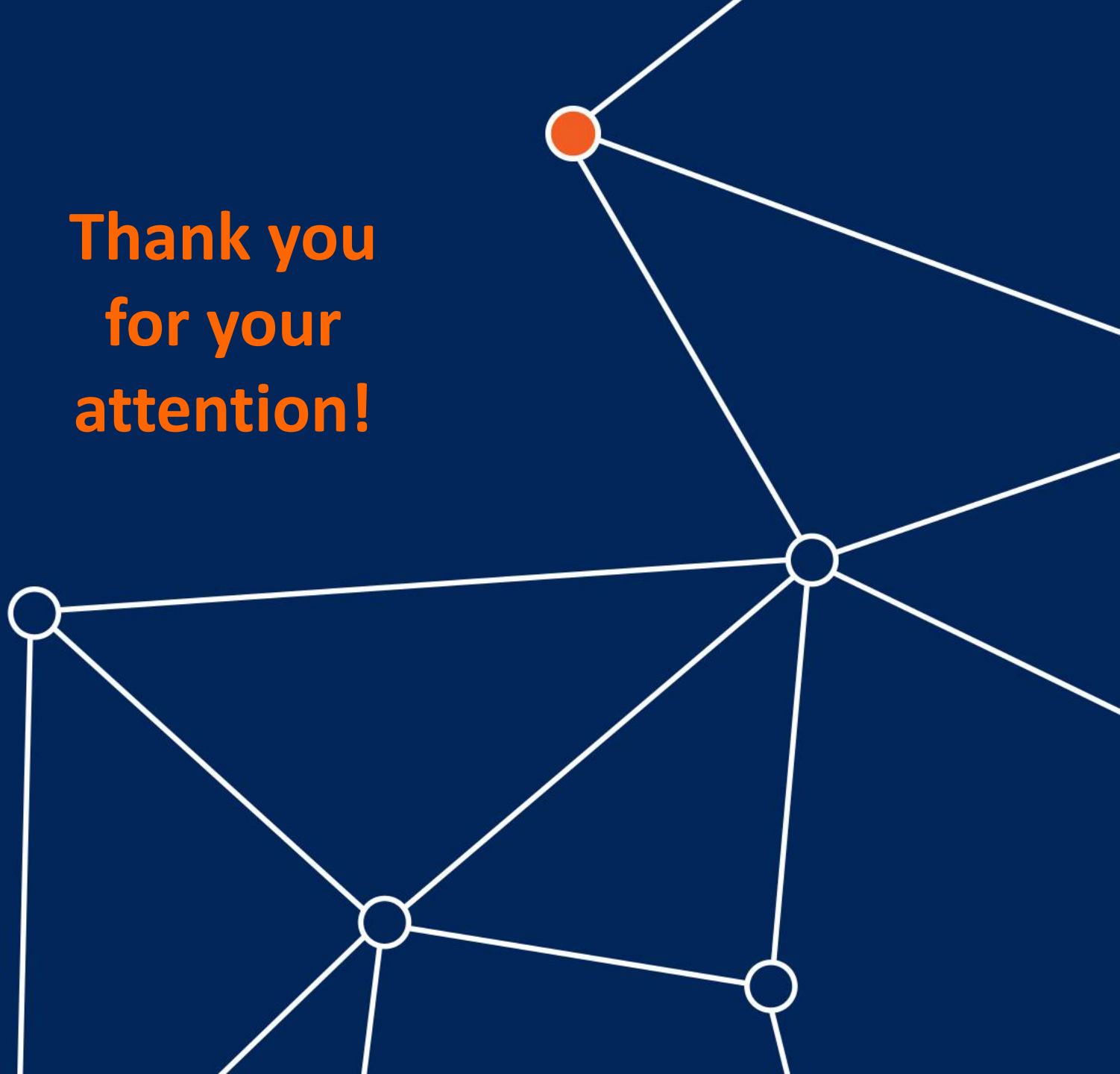


**ICES**  
**CIEM**

[www.ices.dk](http://www.ices.dk)

[Joanne.morgan@ices.dk](mailto:Joanne.morgan@ices.dk)

Science for sustainable seas

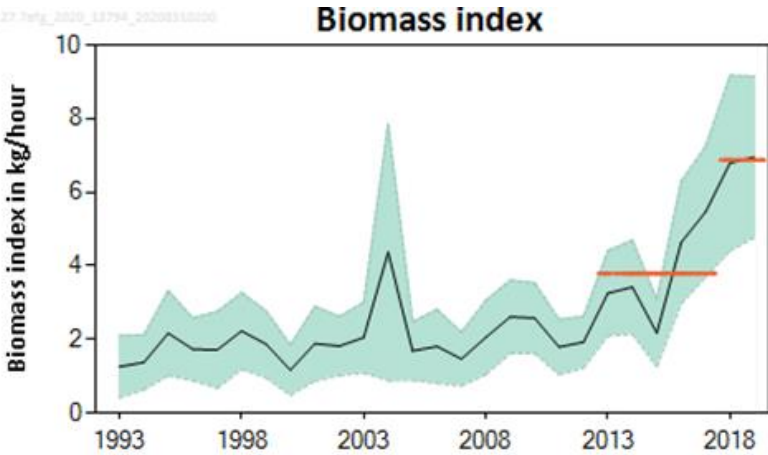


# Skates and rays

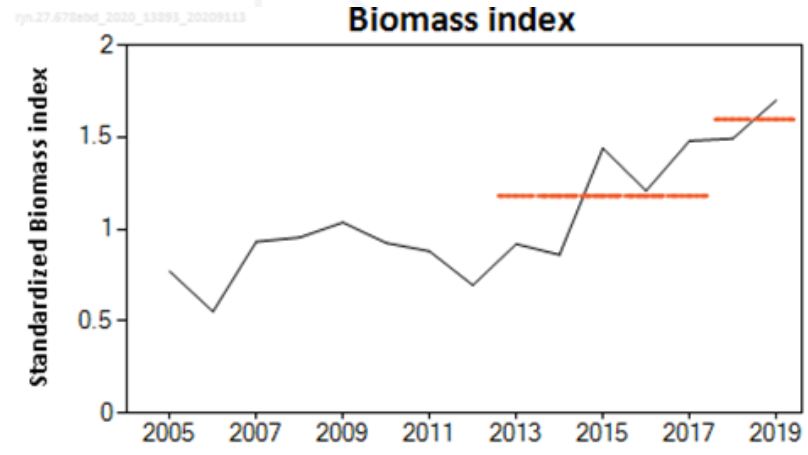
- Advice issued in 2020 for 2021/2022

Stock	Landings (2020)	Advice for 2022 Landings	Rationale
Thornback ray in 7.a and f-g	909	1596	PA - based on survey index (UK(E&W)-BTS-Q3)
Cuckoo ray in 6,7, 8abd	2453	3150	PA - based on survey indices (IGFS and EVHOE)
Spotted ray in 7.a and 7.e-h	741	1041	PA - based on survey index (UK(E&W)-BTS-Q3)
Blonde ray in 7.a and f-g	716	1703	PA - based on historical landings

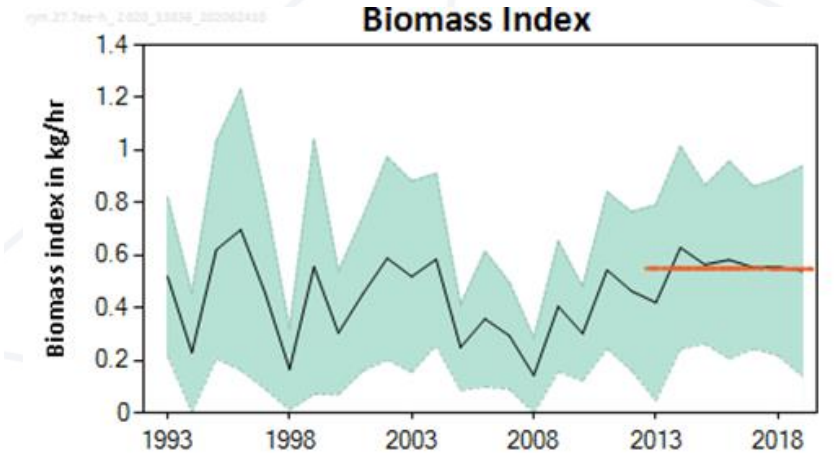
Thornback ray in 7.a, fg



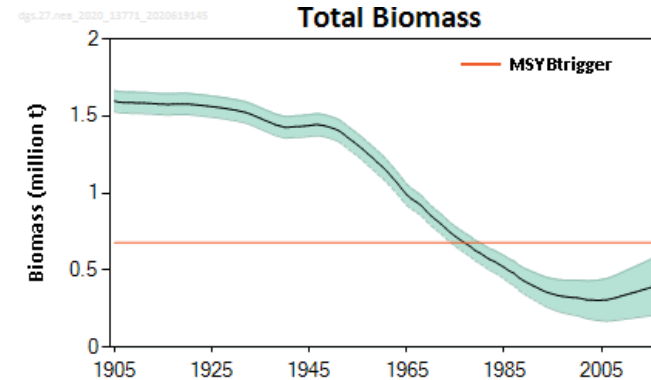
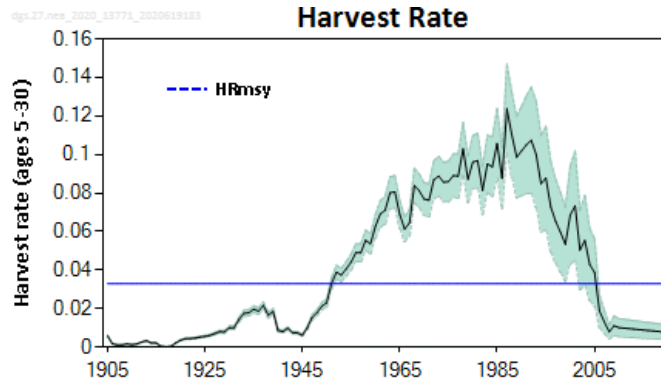
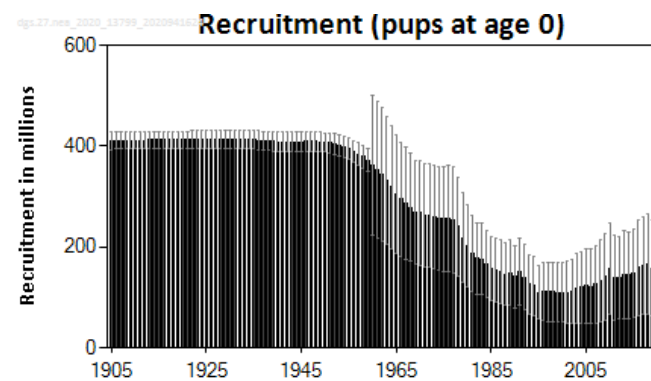
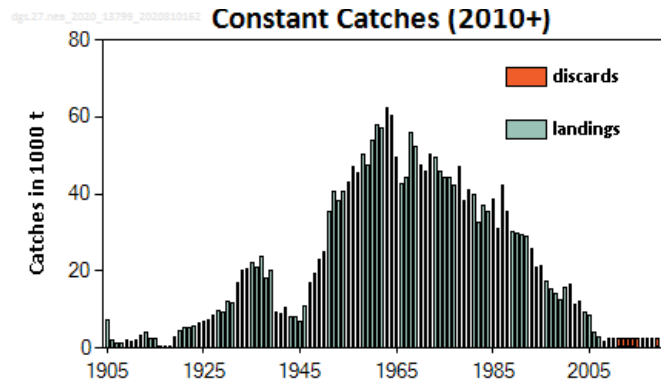
Cuckoo ray in 6, 7, 8 abd



Spotted ray in 7.a, 7e-h



## Advice issued in 2020 for 2021/2022: No targeted fisheries.



- Catch in 2019 - 3620 t
- Stock benchmarked in 2021.
  - New catch estimates including discards.
  - Additional survey indices
  - Fecundity data
  - Reference points
- New assessment using the benchmark results in 2022.