

ICES advice for North Western Waters stocks for 2024

NWWAC meeting, July 2025

IRISH SEA

Joanne Morgan
ICES ACOM vice-chair

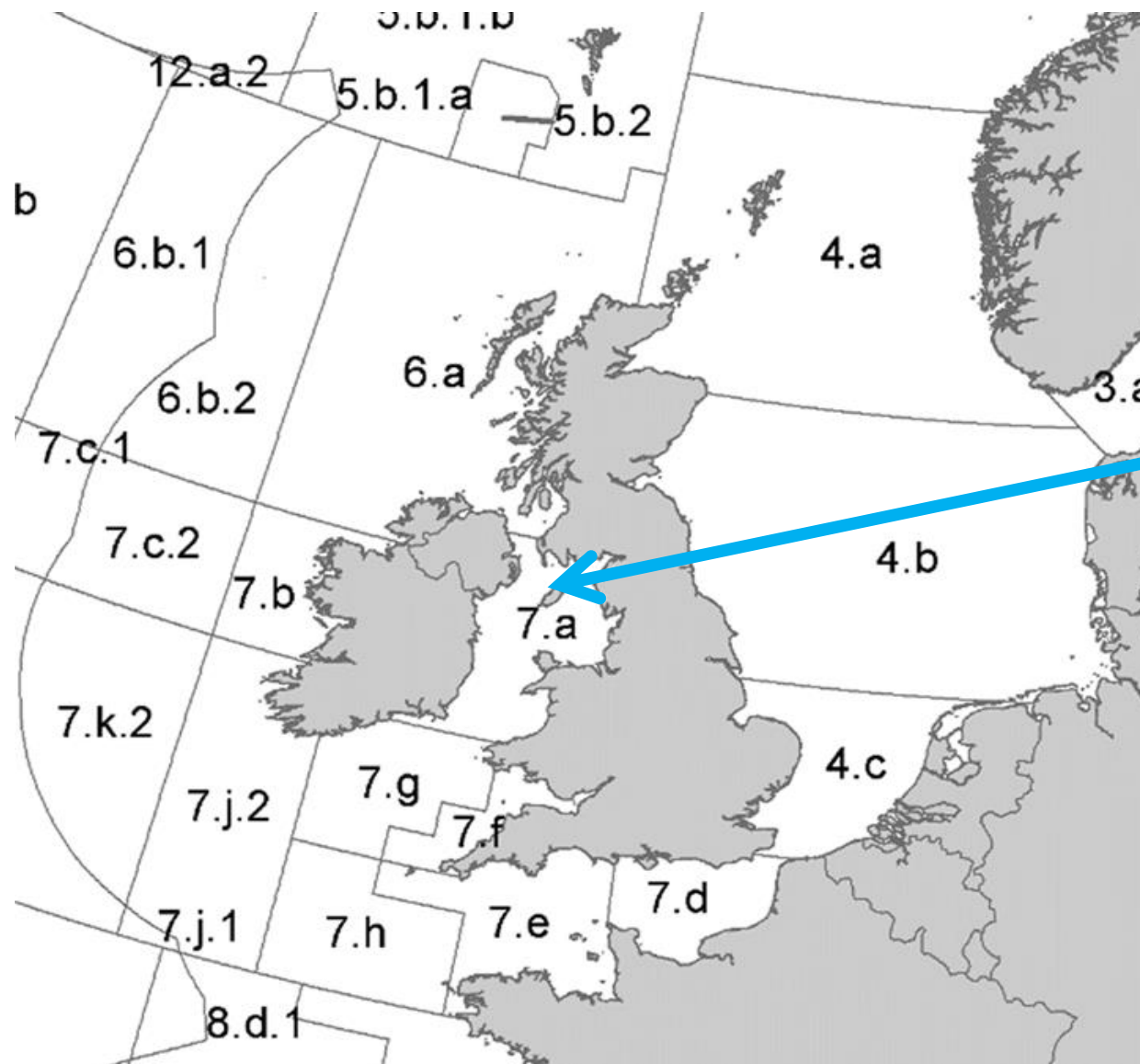


Science for sustainable seas



Image Dirk Vonten, Fotolia

Irish Sea (7.a)



- Cod
- Haddock
- Sole
- Plaice
- Seabass
- Whiting

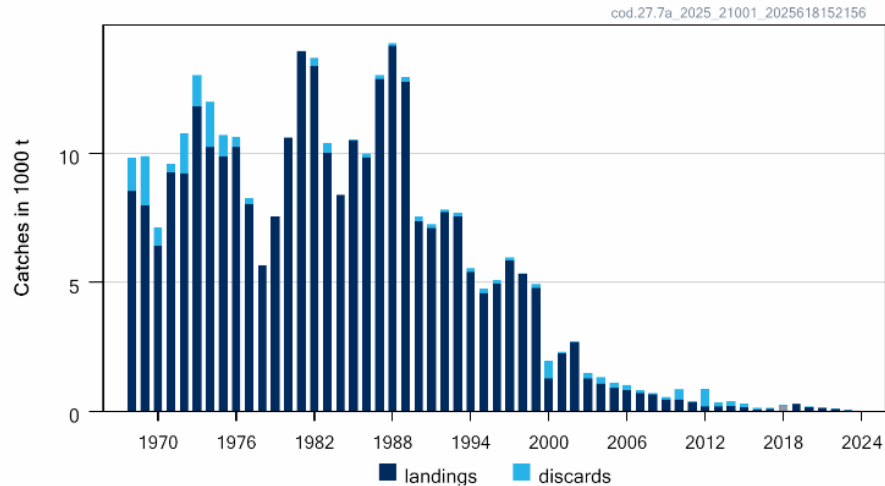
IN AUTUMN:

- Nephrops (FUs 14-15-19)
- Rays and skates
- Spurdog

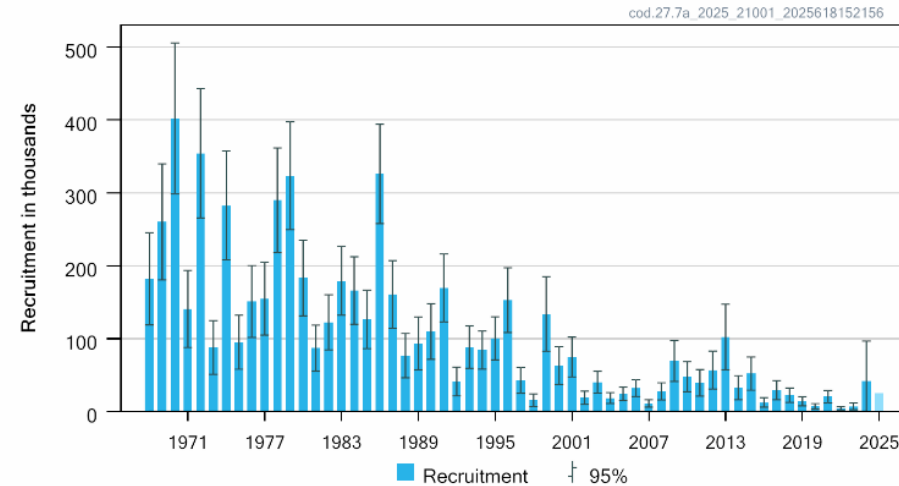
Cod in the Irish Sea (7.a)

Advice for 2026, MSY and PA: Catch 0 t no change

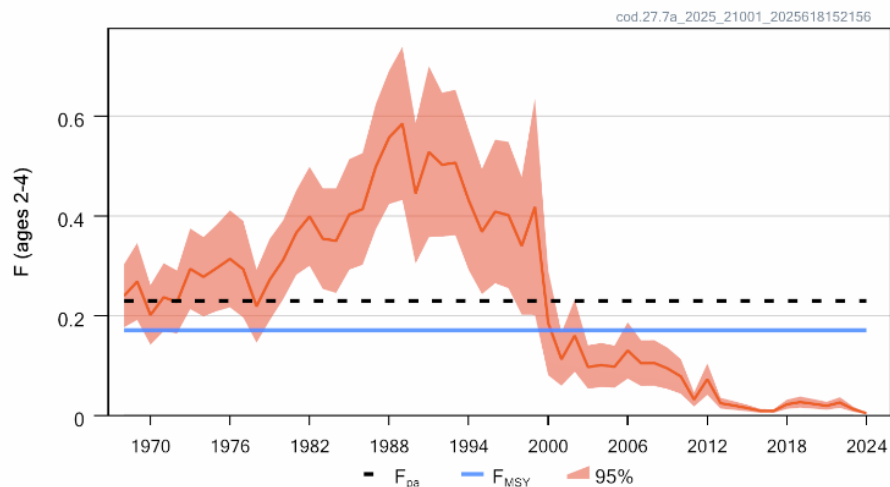
Catches



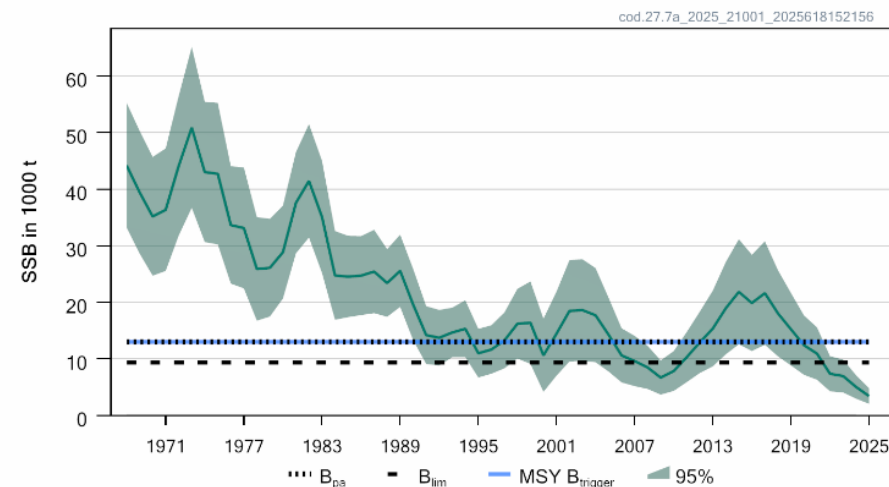
Recruitment (age 0)



F



SSB

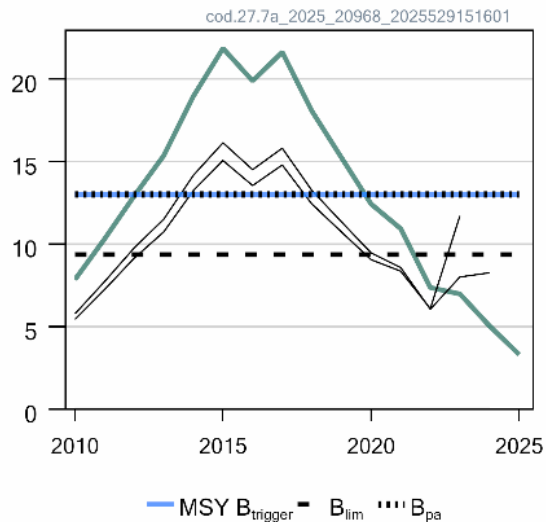


- F below FMSY
- SSB below Blim
- SSB will remain below Blim under all catch scenarios
- UK data revised 2021-2023
- 3 incomplete surveys

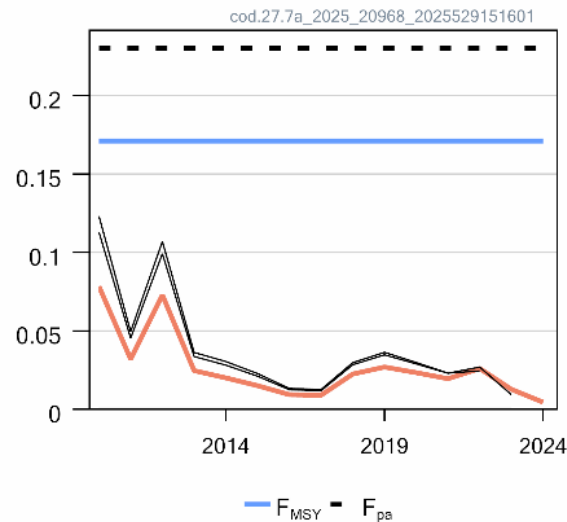
Cod in the Irish Sea (7.a)

Advice for 2026, MSY and PA: Catch 0 t no change

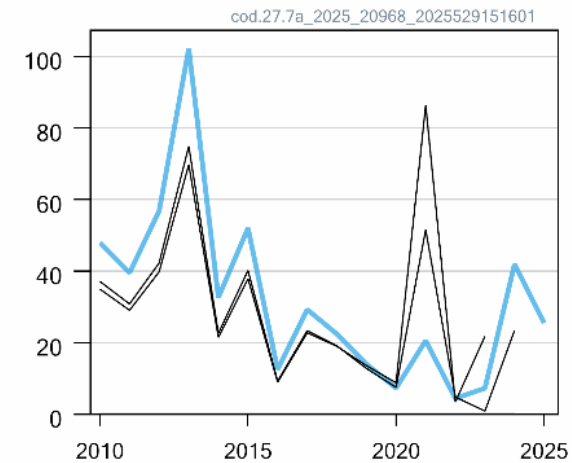
SSB (1000 t)



F (ages 2-4)



Rec (age 0; Millions)



- Assessment retro rescales historic stock size
- The assessment is highly sensitive to recruitment index and that survey incomplete
- Regardless SSB below B_{lim}

Cod in the Irish Sea (7.a)

Catch (2024) : 15 t (27% discards)

$F(2025) = 0.0144$ (Average $F_{2022-2024}$)

$SSB(2026) = 5\,387\text{ t} < B_{lim} (9\,364\text{ t})$ $F_{MSY} = 0.171$

Basis	Total catch (2026)	Projected landings (2026)	Projected discards (2026)	F_{total} (2026)	$F_{projected}$ landings (2026)	$F_{projected}$ discards (2026)	Spawning -stock biomass (SSB; 2027)	% SSB change *	% total allowable catch TAC change^
ICES advice basis									
Maximum sustainable yield (MSY) and precautionary considerations: $F = 0$	0	0	0	0	0	0	6830	27	-100
Other scenarios									
MSY approach: $F_{MSY} \times SSB(2026)/MSY B_{trigger}$	434	335	98	0.071	0.062	0.0095	6322	17.3	163
$F = 0$	0	0	0	0	0	0	6830	27	-100
EU MAP**: $F_{MSY lower} \times SSB(2026)/MSY B_{trigger}$	360	278	82	0.058	0.051	0.0079	6408	18.9	118
EU MAP**: $F_{MSY lower}^{**}$	833	643	190	0.141	0.122	0.0190	5864	8.9	400
$F = F_{MSY}$	995	767	227	0.171	0.148	0.023	5680	5.4	500
$F = F_{pa}$	1299	1001	298	0.23	0.199	0.031	5340	-0.88	690
$F = F_{2025}$	91	70	20	0.0144	0.0124	0.00193	6723	25	-45
Rollover TAC	165	128	37	0.026	0.023	0.0035	6635	23	0
$SSB(2027) = SSB(2026)$	1257	968	288	0.22	0.192	0.030	5387	0	660
$SSB(2027) = B_{lim}^{***}$									
$SSB(2027) = B_{PA} = MSY B_{trigger}^{***}$									

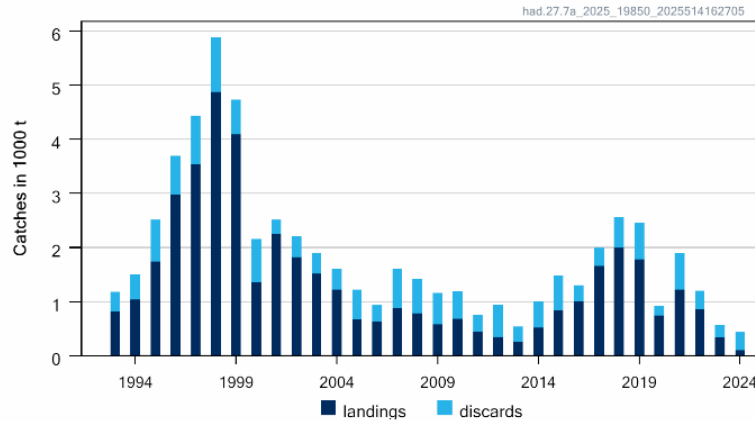
SS3

Excludes landings 33E2 and 33E3 (part of 7e-k) in 2024 48% of catch in division 7a

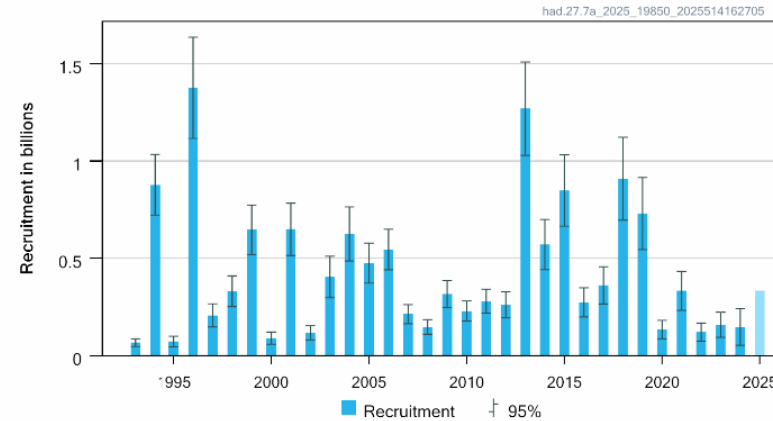
Haddock in the Irish Sea (7.a)

Advice for 2026, MSY: Catch: $\leq 1\,331\text{t}$ advice -30%

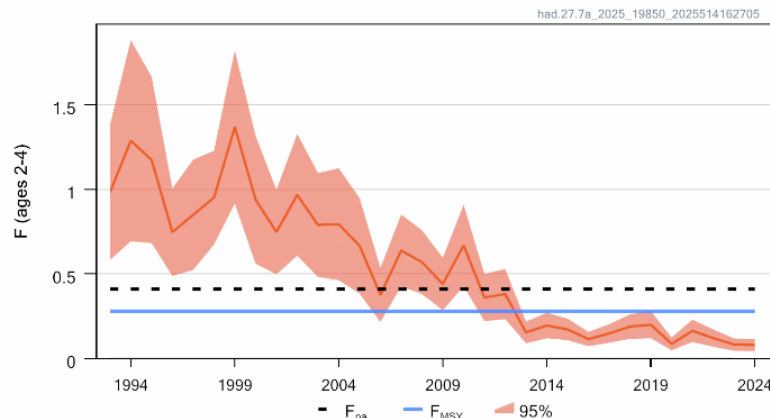
Catches



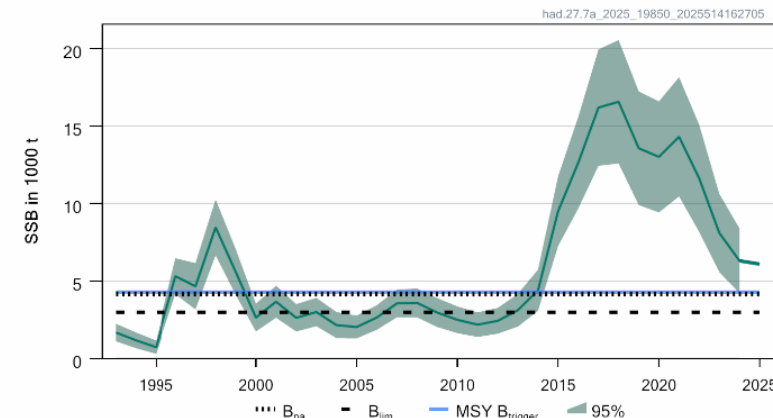
Recruitment (age 0)



F



SSB



- SSB declining but above MSY Btrigger
- F below F_{MSY}
- Declining stock size, SSB revised downwards, low recent recruitment
- 3 incomplete surveys (minimal impact)
- Revised UK 2021-2023 data (minimal impact)
- Retro – downscales SSB and upscales F

EU MAP : Catch: 981 – 1620 t

Haddock in the Irish Sea (7.a)

Catch (2024) : 435 t (77% discards)

F(2025) = 0.094 (Average F₂₀₂₂₋₂₀₂₄)

SSB (2026)= 5 171t > MSY_{Btrigger} (4 281 t) F_{MSY}= 0.28

Table 2 Haddock in Division 7.a. Annual catch scenarios. Weights are in tonnes.

Basis	Total catch (2025)	Projected landings (2025)	Projected discards (2025)	F _{total} (2025)	F _{projected} landings (2025)	F _{projected} discards (2025)	SSB (2026)	% SSB change*	% TAC change^	% advice change**
ICES advice basis										
MSY approach: F _{MSY}	1893	1243	650	0.28	0.127	0.153	6264	-21	-16.4	-16.4
Other scenarios										
EU MAP***: F _{MSY}	1893	1243	650	0.28	0.127	0.153	6264	-21	-16.4	-16.4
EU MAP***: F _{MSY lower}	1396	920	476	0.20	0.091	0.109	6730	-15.0	-38	-38
EU MAP***: F _{MSY upper}	2300	1506	794	0.35	0.159	0.191	5884	-26	1.64	1.64
F = 0	0	0	0	0	0	0	8060	1.81	-100	-100
F = F _{pa}	2632	1719	913	0.41	0.186	0.22	5578	-30	16.3	16.3
F = F _{lim}	3099	2017	1082	0.5	0.227	0.27	5149	-35	37	37
SSB ₂₀₂₆ = B _{lim}	5562	3529	2033	1.12	0.51	0.61	2994	-62	146	146
SSB ₂₀₂₆ = B _{pa}	4203	2708	1495	0.74	0.34	0.41	4160	-47	86	86
SSB ₂₀₂₆ = SSB ₂₀₂₅	149	99	50	0.0198	0.0090	0.0109	7917	0	-93	-93
SSB ₂₀₂₆ = MSY B _{trigger}	4066	2624	1443	0.71	0.32	0.39	4281	-46	80	80
F = F ₂₀₂₄	756	500	256	0.104	0.047	0.057	7337	-7.3	-67	-67

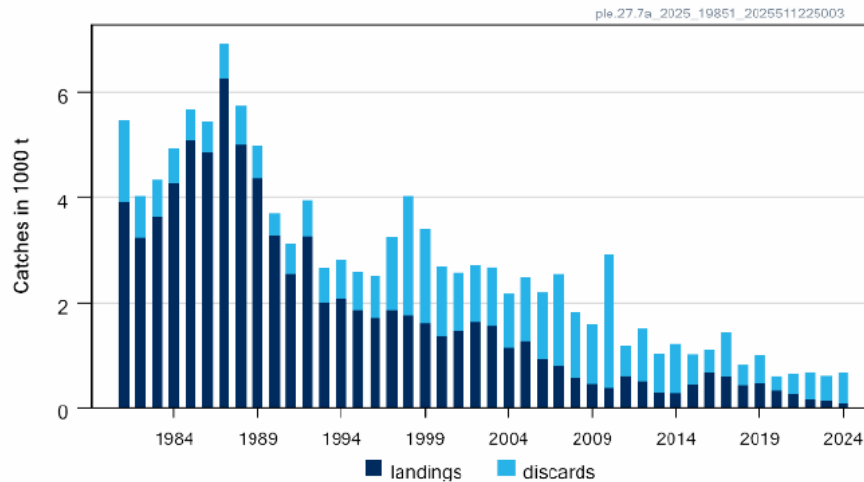
ASAP model
(NOAA)

Landings from south of Division 7.a (rectangles 33E2-3) are part of 7b-k 4.93 times landings rest of Div 7a

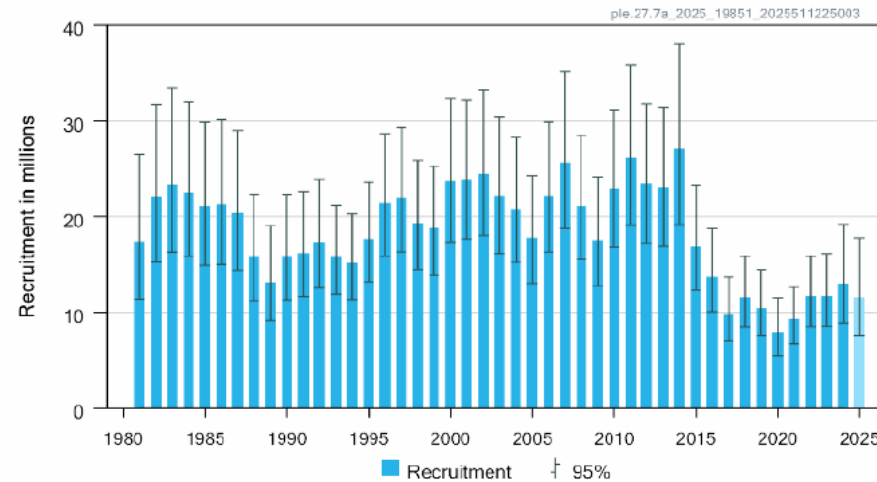
Plaice in the Irish Sea (7.a)

Advice for 2026, MSY: Catch ≤ 614 t -59%

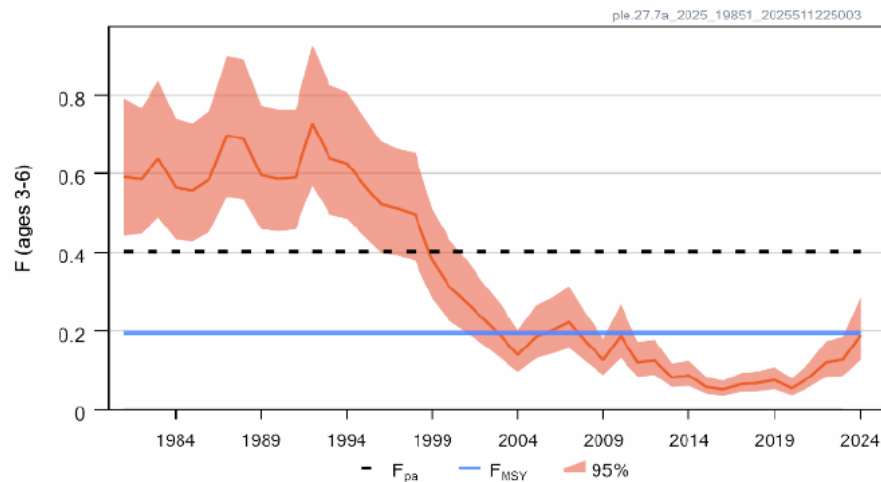
Catches



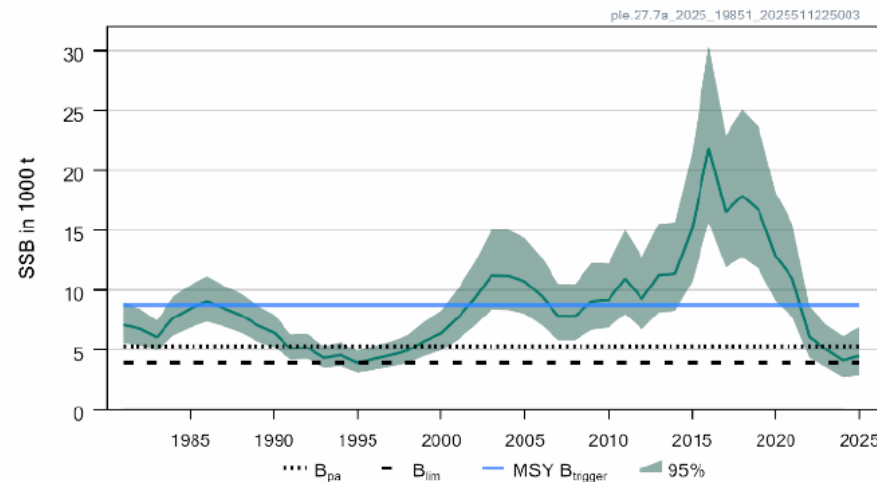
Recruitment (age 1)



F



SSB



- SSB below $MSY B_{trigger}$.
- F below F_{MSY}
- Downward revision SSB (retrospective) and SSB below trigger so target F reduced
- 3 missing surveys (minimal impact)
- UK 2021-2023 data revised (minimal impact)

Plaice in the Irish Sea (7.a)

Catch (2024) : 678 t (84 % discards, 40% of these esimated to survive)

$F(2025) = 0.19$ (Average $F_{2022-2024}$)

$SSB(2026) = 4788 \text{ t} < MSY_{Btrigger} (8757\text{t})$ $F_{MSY} = 0.196$

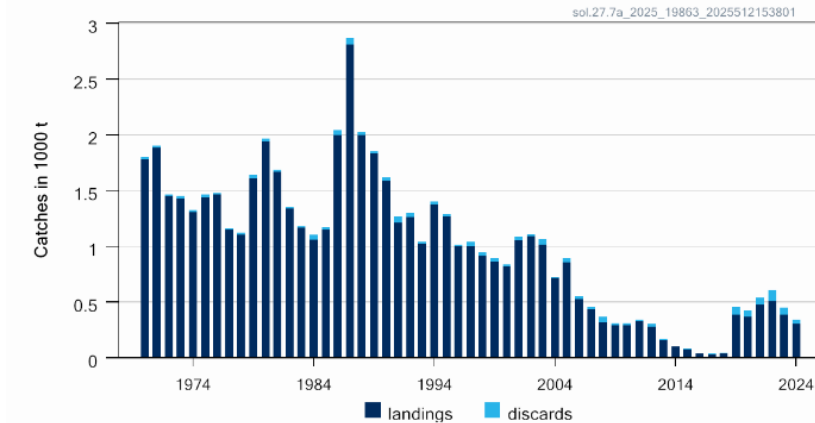
SAM
assessment

Basis	Total catch (2026)	Projected landings (2026)	Projected Surviving discards (2026)	Projected dead discards (2026)	Total projected discards* (2026)	F_{total} (2026)	$F_{projected}$ landings (2026)	$F_{projected}$ discards ** (2026)	Spawing-stock biomass (SSB; 2027)	% SSB change ***	% advice change ^	Probabil ity of SSB (2027) < B_{lim} (%) ^^^
ICES advice basis												
Maximum sustainable yield (MSY) approach: $F = F_{MSY} \times SSB_{2026} / MSY B_{trigger}$	614	138	190	285	476	0.107	0.0194	0.088	5213	8.9	-59	11.2
Other scenarios												
F_{MSY}	1081	243	335	503	839	0.196	0.035	0.161	4908	2.5	-28	19.6
$F_{MSY lower} \times SSB_{2026} / MSY B_{trigger}$	423	95	131	197	328	0.073	0.0132	0.060	5336	11.4	-72	9.2
$F_{MSY upper} \times SSB_{2026} / MSY B_{trigger}$	898	202	279	418	696	0.160	0.029	0.131	5013	4.7	-40	16.9
$F = F_{MSY lower}$	753	169	234	350	584	0.133	0.024	0.109	5117	6.9	-50	13.6
$F = F_{MSY upper}$	1551	348	481	722	1203	0.293	0.053	0.24	4588	-4.2	3.1	29
$F = F_{PA}$	2038	457	632	948	1580	0.403	0.073	0.33	4284	-10.5	36	38
$F = 0$	0	0	0	0	0	0	0	0	5622	17.4	-100	4.9
$SSB_{2027} = B_{lim}$	2555	574	793	1189	1982	0.53	0.097	0.44	3958	-17.3	70	50
$SSB_{2027} = B_{PA}$	488	110	152	227	379	0.084	0.0153	0.069	5294	10.6	-68	10.0
$SSB_{2027} = MSY B_{trigger} ^^$												
Rollover advice	1504	338	467	700	1166	0.28	0.051	0.23	4620	-3.5	0	28
$F = F_{2025}$	1052	236	326	490	816	0.190	0.034	0.156	4927	2.9	-30	19.1
$SSB_{2027} = SSB_{2026}$	1260	283	391	586	977	0.23	0.042	0.190	4788	0	-16.2	23

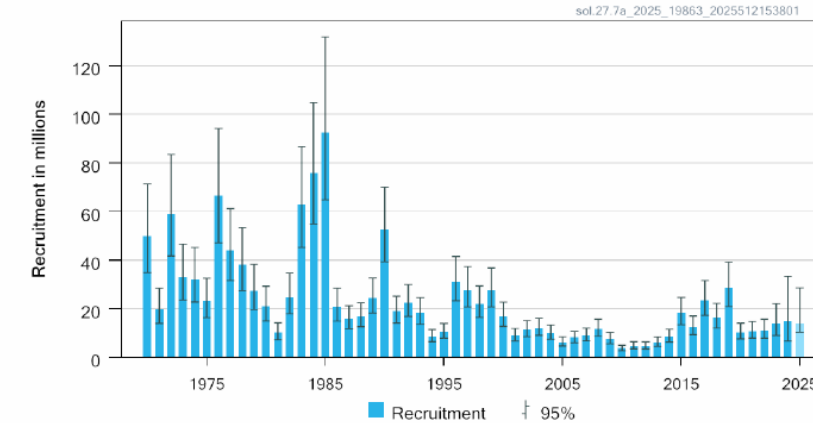
Sole in the Irish Sea (7.a)

Advice for 2026, MSY: ≤ 545 t advice -10.5%

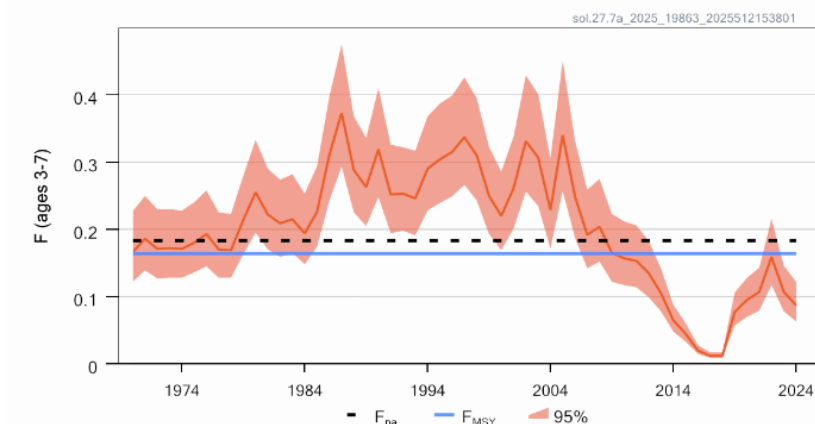
Catches



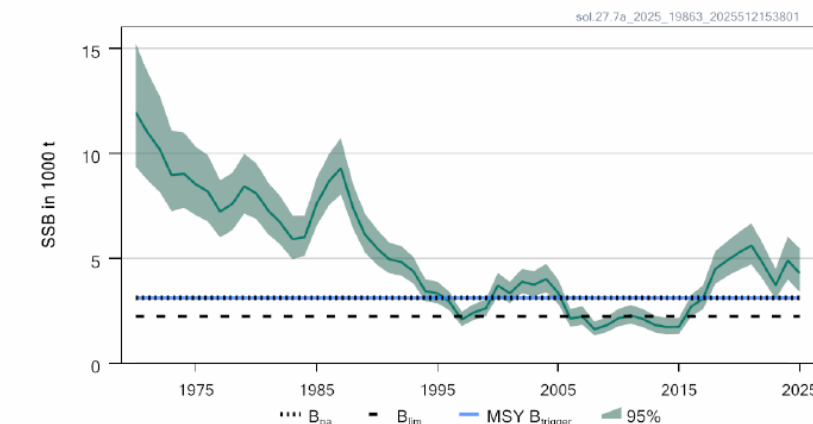
Recruitment (age 1)



F



SSB



- F below F_{MSY}
- SSB above MSY $B_{trigger}$
- Downward revision of recruitment estimates in recent years (retro)
- Revised catch
- Survey incomplete
- Both minimal impact

Sole in the Irish Sea (7.a)

Catch (2024) : 343t (11 % discards)

$F(2025) = 0.118$ (average 2022-2024)

$SSB(2026) = 4352 > MSY_{B_{trigger}} (3\ 129)$ $F_{MSY} = 0.164$

SAM

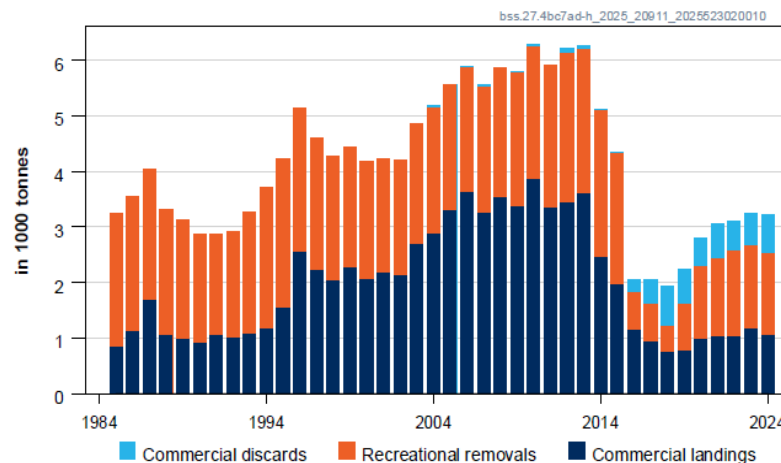
Basis	Total catch (2026)	Projected landings (2026)	Projected discards (2026)	F_{total} (2026)	$F_{projected}$ landings (2026)	$F_{projected}$ discards (2026)	Spawning -stock biomass (SSB; 2027)	% SSB change*	% advice change^	Probability of SSB (2027) < B_{lim} (%)^^
ICES advice basis										
Maximum sustainable yield (MSY) approach: $F = F_{MSY}$	545	472	73	0.164	0.129	0.035	4264	-2	-10.5	0.040
Other scenarios										
$F = F_{MSY\ lower}$	422	366	56	0.125	0.098	0.027	4370	0.41	-31	0.02
$F = F_{MSY\ upper}$	603	522	81	0.183	0.144	0.039	4213	-3.2	-0.99	0.07
$F = 0$	0	0	0	0	0	0	4773	9.7	-100	0
$F = F_{PA}$	603	522	81	0.183	0.144	0.039	4213	-3.2	-0.99	0.07
$SSB_{2027} = B_{lim}$	2969	2536	433	1.45	1.14	0.31	2235	-49	390	50
$SSB_{2027} = B_{pa} = MSY\ B_{trigger}$	1885	1623	262	0.71	0.56	0.151	3129	-28	210	13.1
$SSB_{2027} = SSB_{2026}$	442	383	59	0.131	0.103	0.028	4352	0	-27	0.02
$F = F_{2025}$	399	346	53	0.118	0.093	0.025	4389	0.85	-34	0.01

Advice for 2026

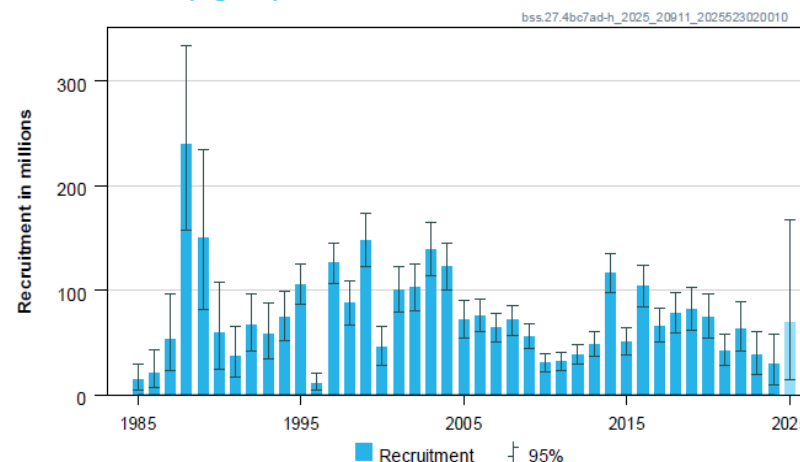
- Benchmark 2025 - WKBSEABASS
- With Southern bss.27.8ab – northern and central Bay of Biscay
- Examined
 - All input data
 - Stock structure – move 29 % Q3 and 41 % Q4 catch to south
 - Recreational data – new time series 95% post release survival
 - New natural mortality
 - 3 new recruitment surveys
- New SS3 model accepted

Advice for 2026, MSY: Total removals $\leq 5\,180$ t: advice +98%

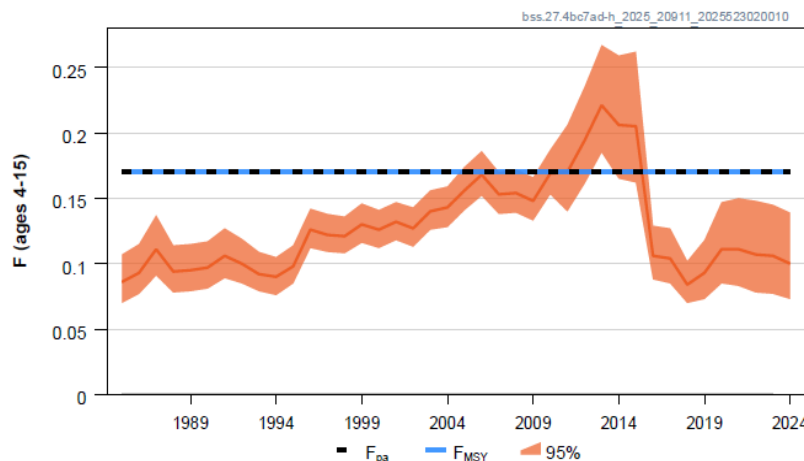
Catches



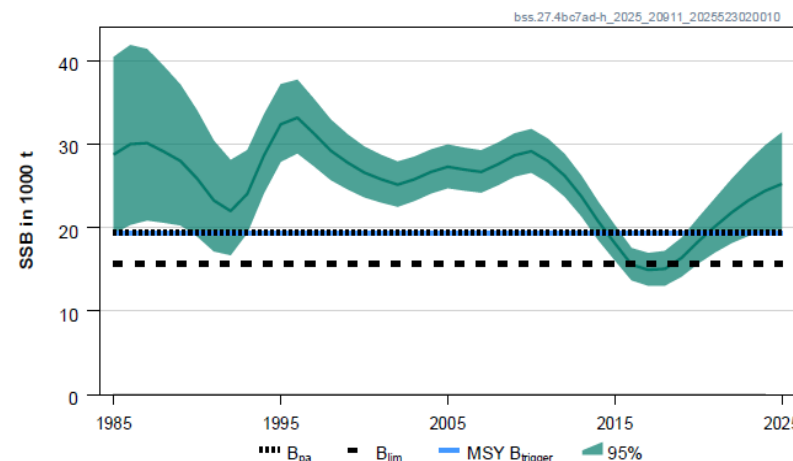
Recruitment (age 0)



F



SSB



- SSB above MSYBtrigger
- F below F_{MSY}
- New assessment and reference points

EU MAP : Catch: 4472 – 5180 t

Sea bass in divisions 4.b–c, 7.a, and 7.d–h

Catch 2024: 3828 t (1282 t commercial, 716 t discards and 1830 t recreational)

F (2025)= 0.104 (average 2022-2024)

SSB(2026) = 25 330 > B_{lim} 15 666 t and > MSY B_{trigger} = 19 339t F_{MSY} = 0.170



14

SS3

Basis	Bss.27.4bc7ad-h sea bass stock											
	Total removals (2026)*	Commercial landings** (2026)	Recreational kept** (2026)	Commercial discards** (2026)	Recreational dead released** (2026)	Survival recreational released** (2026)	F _{ages 4–15} total removals (2026)*	F _{ages 4–15} commercial catch (2026)	F _{ages 4–15} recreational removals (2026)	Spawning-stock biomass (SSB; 2027)	% SSB change^	% advice change^^
ICES advice basis												
Maximum sustainable yield (MSY) approach: F = F _{MSY}	5180	1821	2302	781	276	5524	0.170	0.086	0.085	23154	-8.6	98
Other scenarios												
F = 0	0	0	0	0	0	0	0	0	0	27544	8.7	-100
EU MAP#: F _{MSY}	5180	1821	2302	781	276	5524	0.170	0.086	0.085	23154	-8.6	98
EU MAP#: F _{MSY} lower	4472	1573	1988	672	239	4772	0.145	0.073	0.072	23751	-6.2	71
EU MAP#: F _{MSY} upper	5180	1821	2302	781	276	5524	0.170	0.086	0.085	23154	-8.6	98
F = F _{PA}	5180	1821	2302	781	276	5524	0.170	0.086	0.085	23154	-8.6	98
SSB ₂₀₂₇ = B _{lim}	14250	4956	6288	2252	755	15090	0.56	0.28	0.28	15666	-38	440
SSB ₂₀₂₇ = MSY B _{trigger} = B _{pa}	9757	3413	4321	1504	519	10371	0.35	0.176	0.173	19339	-24	270
SSB ₂₀₂₇ = SSB ₂₀₂₆	2603	917	1159	388	139	2781	0.082	0.041	0.041	25330	0	-0.66
F = F ₂₀₂₅	3271	1152	1455	489	175	3493	0.104	0.053	0.052	24764	-2.2	25
Total removals advice (2026) = total removals advice (2025)	2620	923	1166	391	140	2799	0.082	0.041	0.041	25317	-0.054	-0.038

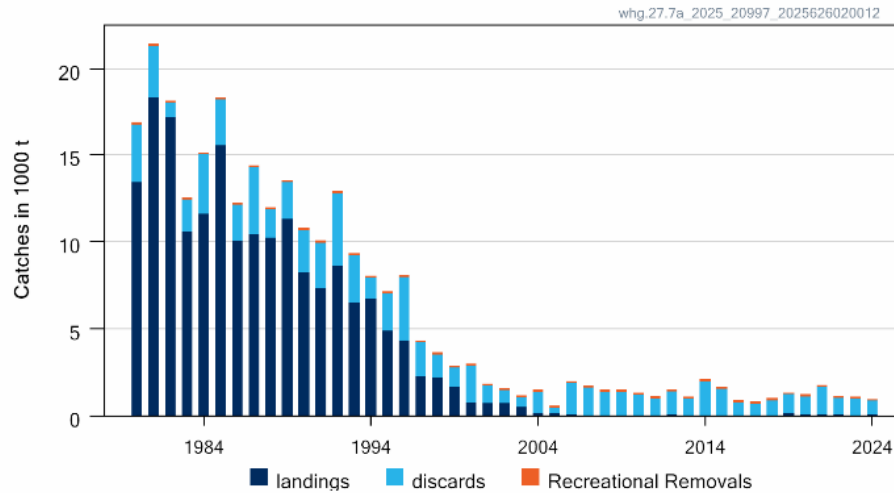
Advice for

- Benchmarked 2025 – WKNSCS
- Examined
 - Input data – recreational data included for full time series survival releases 65%
 - New natural mortality estimates
 - Revised survey index – 3 surveys modelled with VAST
 - Revised time varying maturity ogive
 - Discard rate – calculated each year
 - Discard survival – 0
- Accepted SAM - previously ASAP
- New reference points estimated – shortened time series starting in 1992 – evidence of regime shift

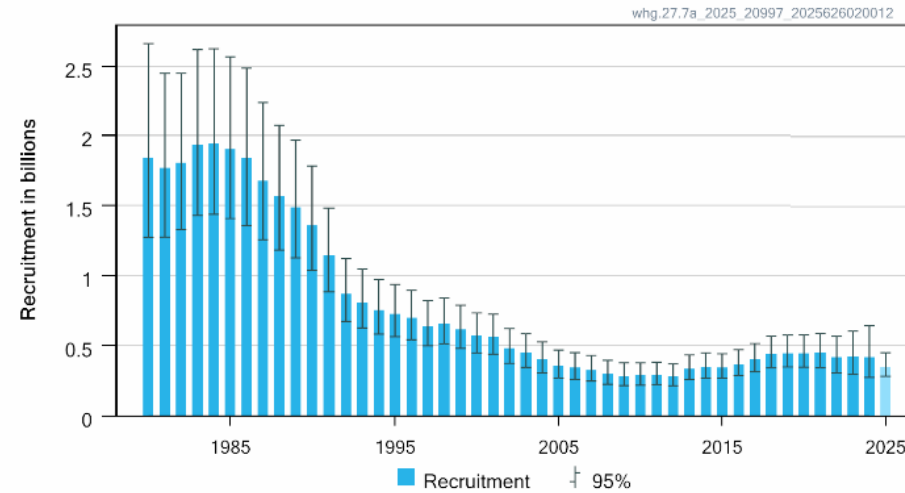
Whiting in the Irish Sea (7.a)

Advice for 2026, MSY: Catch ≤ 200 t NA – previous 0

Catches

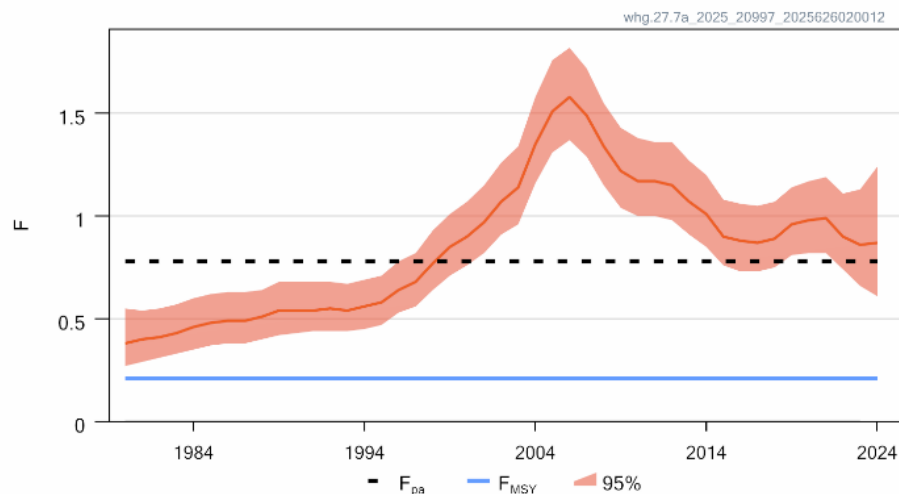


Recruitment (age 0)

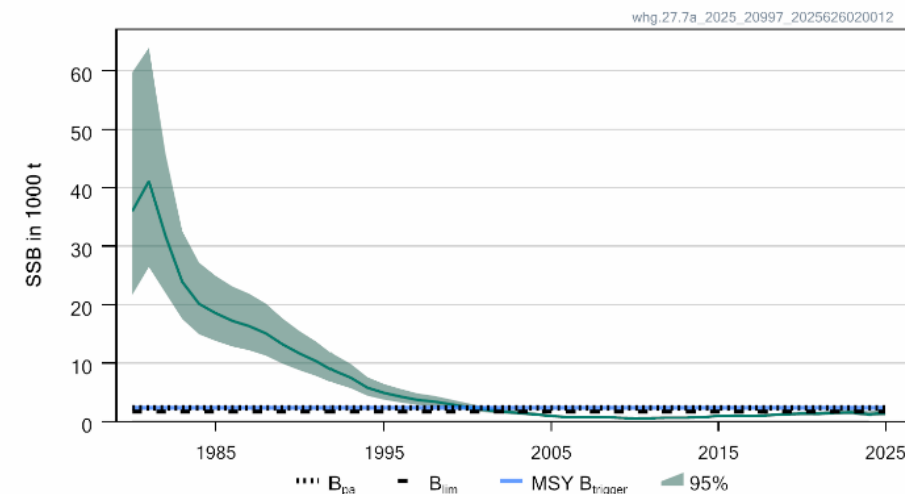


- SSB below B_{lim}
- F above F_{MSY} and F_{pa}
- Change in assessment and reference points
- 1 missing survey (minimal impact)
- Revised UK 2021-2023 data (minimal impact)

F



SSB



Whiting in the Irish Sea (7.a)

Catch 2024: 973 t (83.6% discards, 98 t recreational catch)

$F(2025)=0.87$ (F_{sq} = average 2020-2024, scaled to F_{2024})

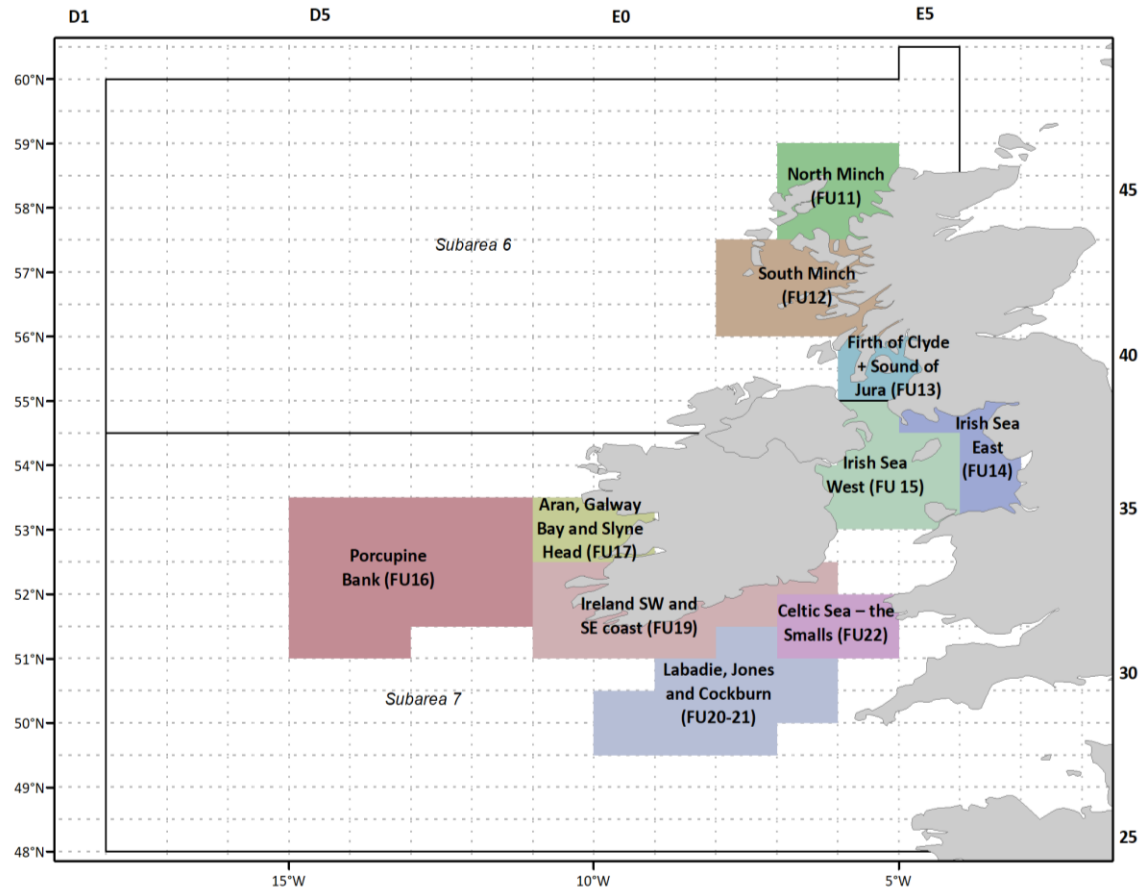
$SSB(2026)=1349 < B_{lim}$ (1670 t) and $MSY_{btrigger}$ (2322 t) $F_{MSY}=0.21$

Basis	Total catch (2026)	Projected landings (2026)	Projected discards (2026)	Projected recreational removals (2026) *	F total (2026)	Spawning -stock biomass (SSB; 2027)	% SSB change**	% total allowable catch (TAC) change ***	% probability of SSB (2027) < $B_{lim}^{^^}$
ICES advice basis									
Maximum sustainable yield (MSY) approach: $F_{MSY} \times SSB_{2026}/MSY B_{trigger}$	200	27	153	20	0.122	2109	56	-72	6.2
Other scenarios									
F_{MSY}	333	45	255	33	0.21	1975	46	-54	14.4
F_{PA}	1021	138	781	102	0.78	1333	-1.19	42	88
$F = 0$	0	0	0	0	0	2309	71	-100	1.40
F_{MSY} lower	259	35	198	26	0.160	2052	52	-64	9.8
F_{MSY} lower $\times SSB_{2026}/MSY B_{trigger}$	154	21	118	15	0.093	2155	60	-79	4.3
$SSB_{2027} = B_{lim}$	646	87	494	65	0.44	1670	24	-10.4	50
$SSB_{2027} = MSY B_{trigger} = B_{PA}^{^}$									
$SSB_{2027} = SSB_{2026}$	1001	135	765	100	0.76	1349	0	39	86
$F = F_{2025}$	1107	150	847	111	0.87	1258	-6.8	54	93

SAM

Assessment and advice are for Division 7.a, excludes 33E2 and 33E3 (belong to b-ce-k 42% of Div 7a landings in 2024)

Nephrops



FU	Advice 2025	Change	Basis
14 – Irish Sea, East	≤ 297 t	+34%	MSY
15 – Irish Sea, West	≤ 10062 t	-16%	MSY
19 – Irish Sea, Celtic Sea, eastern part of southwest Ireland	385-433 t	+75%	MAP

New advice released in autumn
Management should be at FU level



**Thank you
for your
attention!**



**ICES
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