Key Stocks

Atlantic Herring (1 of 2)

	2010-2012			2013-2015			2016-2018			2019-2021		
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021****
OFL	145,000	134,000	127,000	169,000	136,000	114,000	138,000	117,000	111,000	30,668	41,830	59,788
ABC	106,000	106,000	106,000	114,000	114,000	114,000	111,000	111,000	111,000	21,266	16,131	16,131
Total ACL/OY	91,200*	91,200	91,200	107,800	107,800	107,800	104,800	104,800	104,800 ***(49,900)****	15,065	11,571	11,471
Catch (U.S.)	68,454	82,444	87,171	95,191	93,084	81,203	63,515	48,796	45,527	12,782	8,076	n/a
Catch (NB Weir)	12,221	4,133	513	6,440	2,667	884	4,849	2,368	11,912	5,115	6,041	n/a
Stock Assessment	2009 TRAC (US/Canada) Update Assessment, ASAP			SAW/SARC 54 Benchmark Assessment, June 2012, ASAP			Operational Update Assessment, 2015, ASAP			SAW/SARC 65 Benchmark Assessment, 2018, ASAP		
Reference Points	BMSY = 670,000 FMSY 0.27; MSY =178,374			SSBMSY = 157,000 FMSY 0.27; MSY =53,000			SSBMSY = 311,145 FMSY = 0.24; MSY = 77,247			SSBMSY proxy = 189,000 FMSY proxy = 0.51; MSY = 112,000		
Status	• Not overfished (651,700; 97%) • Not overfishing (0.14)			• Rebuilt (518,000) • Not overfishing (0.14)			• Rebuilt (622,991) • Not overfishing (0.16)			• Not overfished (SSB=141,473) • Not overfishing (F=0.45)		
Uncertainty	• Significant retrospective pattern; • MSY reference points			• 2008 Year Class • Natural Mortality (M) • Biological Reference Points			• 2011 Year Class • Natural Mortality • Biological Reference Points			• Natural mortality • Stock recruit relationship • Stock structure		
SSC's Rationale	• Recommended 90,000 ABC (40% buffer) but Council asked SSC to revisit; SSC then recommended recent avg. catch, and Council selected 2006-2008 (106,000); • Buffer from ABC/ACL to account for NB weir catch; 3,000 added to 1A if NB weir catch less than 9,000; • Herring PDT – accounting for retro pattern should account for other uncertainty			• Recommended constant catch and 75% FMSY produce close to the same catch/result over three years; • Provides more buffer in Years 1/2 for the 2008 YC; • Addressing M in this manner seems appropriate for this species; • Achieves result of ecosystem- based CR by default, if not by design; • Supported by industry (stability)			• Constant catch is preferred approach of Council and industry. • Key attributes of stock and assessment have not changed, but 2011 year class will contribute significantly. • Retro has become worse, Mohn's rho correction applied. • P overfishing is 50% in year 3, but P overfished is zero. • Realized catch generally well below ABC. Catch to estimated consumption is 1:4.			Meeting October 2018: • Recommended 2019 and 2020 based on the ABC control rule but keep ABC in 2021 the same as 2020 due to the uncertainty in the projections. • Recommended the NEFMC request an update assessment in 2020 to verify projected trend in biomass and recruitment.		

Note: All numbers are expressed in metric tons (mt). U.S. Atlantic herring catch estimates and NB weir catch are from SAW65 which are calculated differently than final catch estimate, and 2020-2024 are from the 2020, 2022 and 2024 management track assessments.

** In-season action was implemented on August 22, 2018 to reduce the 2018 sub-ACLs to prevent overfishing based on results of 2018 assessment. ** Updated in next cycle.*

Atlantic Herring (2 of 2)

	2021-2023			2023-2025			2025-2027		
	2021	**2022**	**2023****	**2023**	**2024**	**2025****	**2025**	**2026**	**2027**
OFL	23,423	26,292	44,600	29,138	32,233	40,727	20,802	23,491	31,075
ABC	9,483	8,767	8,767	16,649	23,409	28,181	8,587	13,165	17,187 (SSC) 13,165 (Council)
Total ACL/OY	4,814	4,098 3,813 *adjusted due to 2020 overage*	4,098	12,429	19,189 19,141 *adjusted due to 2022 overage*	23,961	4,566 (*final)* 2,710 (i*nitial due to in-season adjustment)*	9,134	9,134
Catch (U.S.)	5,202	3,929	n/a	9,505					
Catch (NB Weir)	2,663	3,937	n/a	936					
Stock Assessment	Management Track Assessment, 2020 ASAP			Management Track Assessment, 2022 ASAP			Management Track Stock Assessment, 2024 ASAP		
Reference Points	SSBmsy proxy = 269,000 Fmsy proxy = 0.54; MSY = 99,400			SSBmsy proxy = 185,750 mt Fmsy proxy = 0.5 MSY = 68,980 mt.			SSBmsy proxy = 186,367 mt Fmsy proxy = 0.45 MSY = 78,710 mt.		
Status	• Overfished (SSB2019 = 77,883; rho adjusted) • Not overfishing (F2019=0.253, rho adjusted)			• Overfished (SSB2021 = 39,091; rho adjusted) • Not overfishing (F2021= 0.153 , rho adjusted)			• Overfished (SSB2023 = 47,955; rho adjusted) • Not overfishing (F2023= 0.263, rho adjusted)		
Uncertainty	• Natural mortality • Stock recruit relationship • Stock structure			• Natural mortality • Stock recruit relationship • Stock structure • Low recruitment / projections			• Natural mortality • Stock recruit relationship • Stock structure • Low recruitment / projections		
SSC's Rationale	Meeting July 2020: • Resolved to make ABC recommendations for 2021 and 2022 based on the ABC control rule and ASAP projections, but recommended keeping ABC in 2023 the same as 2022 due to the uncertainty in recruitment assumptions underlying the projections. • Recommended that the OFL be set to follow the projections for all three years of the advice.			Meeting August 2022: • Recommended setting OFLs and ABCs for fishing years 2023 to 2025 based on the Council's A. herring ABC control rule, applied to projected biomass estimates for 2023-2025. The OFL and ABC projections were consistent with the Council's ABC control rule, based on the rebuilding plan. • Considered applying a constant approach, due to concerns about the projections.			Meetings July 2024, April 2025: • Revised recommendations reflect updated projections. • SSC recommended setting OFLs and ABCs for fishing years 2025 to 2027 based on the Council's ABC control rule. The SSC ultimately decided not to deviate from the control rule recognizing that the Council has the prerogative to make this same determination again if they wish based on their assessment of risk. • The Council decided to hold the ABC in 2026 constant into 2027.		

Georges Bank Yellowtail Flounder (1 of 2)

	2020-2021		2021-2022		2022-2023	
	2020	**2021****	**2021**	**2022****	**2022**	**2023****
OFL (U.S. & Can)	unknown	unknown	unknown	unknown	unknown	unknown
ABC (U.S. & Can)	162	162	125	125	200	200
TAC (U.S. & Can)	162	162	125	125	200	200
Catch (U.S. & Can, CY)	68	51	51	15	15	25
Stock Assessment	2019 TRAC assessment, empirical approach developed in 2014		2020 TRAC assessment, empirical approach developed in 2014		2021 TRAC integrated peer review Adopted new GB Yellowtail Limiter	
Reference Points	Not estimated		Not estimated		Not estimated	
Status	• Overfished • Overfishing is occurring		• Overfished • Overfishing is occurring		• Overfished • Overfishing is occurring	
Uncertainty	• Stock response to low catch not expected • Relationship between quota and catch. • Misreported landings, observer bias		• Missing 2020 survey, used 2 surveys rather than 3 • Relationship between quota and catch. • Low catches in fishery and survey. • Hard to sample, weight-at-age uncertain • Some catch misreporting		• Change in process for setting catch advice • SSC hoped that this technique will be investigated and tested further if it will continue to be used. • Survey biomass appears lower than previously estimated. • Relationship between quota and catch.	
SSC's Rationale	Meeting August 2019: • Consistent with TRAC • Using ABC CR Option D • Continued downward trend of stock, little sign of recovery.		Meeting August 2020: • Consistent with TRAC • Using ABC CR Option D • Recent low recruitment • Consistent with prior SSC advice to not increase catch. • Downward trends of the stock with few signs of recovery. • Productivity is poor.		Meeting August 2021: • Consistent with TRAC • Using ABC CR Option D • Consistent with previous advice of continuing low exploitation on the stock since stock conditions do not appear to have changed from the SSC's 2020 review of this stock. • Stock declining with little signs of recovery. • Fishery not limiting recovery	

Georges Bank Yellowtail Flounder (2 of 2)

	2023-2024		2024-2025		2025-2026		2026
	2023	**2024****	**2024**	**2025****	**2025**	**2026****	**2026**
OFL (U.S. & Can)	unknown	unknown	unknown	unknown	unknown	unknown	57
ABC (U.S. & Can)	200	200	168	168	200	200	57
TAC (U.S. & Can)	**200**	**200**	168	168	168	168	57
Catch (U.S. & Can, CY)	25	12	12	22	22	n/a	n/a
Stock Assessment	2022 TRAC assessment, empirical		2023 TRAC assessment, empirical		2024 management track assessment, Limiter approach		U.S. assessment used: 2024 research track assessment used WHAM, 2025 management track assessment, updated data, maturity correction
Reference Points	Not estimated		Not estimated		Not estimated		• SSB = 7,072 (2,700-18,521) • Fmsy = 0.09 • MSY = 597 (23-2,440)
Status	• Overfished (rebuilt target in 2032) • Overfishing unknown		• Overfished (rebuilt target in 2032) • Overfishing unknown		• Overfished (rebuilt target in 2032) • Overfishing unknown		• Overfished (10% of Btarget) • Overfishing not occurring
Uncertainty	• New DFO survey vessel in 2022 not calibrated • Recent scallop fishery discards uncertain • Fishery does not appear to be limiting stock recovery		• Limiter Approach needs 2 surveys, but since 2020, only 2 surveys available • Lack of rebuilding; fishing does not appear to be a major driver of stock status. • Potential environmental drivers limiting rebuilding.		• The size composition of discards and whether there are size-based discard mortality differences within the scallop dredge fishery will have important implications for interpreting the biomass removed by the fishery.		• Very low catches in the fishery and survey indices make it difficult to track cohorts and may pose challenges for future assessments. • State-space WHAM framework might make it difficult to decipher inferences of environmental vs. fishery effects on the stock • Environmental forecasting might be developed and these forecast environmental conditions might be integrated into future projected recruitment. • Changes in model-estimated biomass, though very small, are substantial relative changes (first negative then positive) in 2019-2021.
SSC's Rationale	Meeting August 2022: • Recommended ABC CR Option D • ABC consistent with Limiter Approach in 2021. • Continuing low exploitation on stock since the resource is in a state of low biomass and poor productivity.		Meeting Sept 2023: • Recommended ABC CR Option D • ABC consistent with Limiter Approach in 2021. • Hope ongoing RTA will replace Limiter Approach		Meeting July 2024: • Recommended ABC CR Option D • ABC consistent with Limiter Approach in 2021. • Continued low stock biomass and poor recruitment • Recommended continued investigation of environmental drivers.		Meeting October 2025: • OFL and ABC set by TMGC • Recommends managing stock as a bycatch-only stock

Southern New England/Mid-Atlantic Yellowtail Flounder (1 of 1)

	2020-2022				2023-2025			2026-2030				
Specs year	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
OFL	90	31	71	184	55	80	345	46	56	67	80	92
ABC	68	22	22	22	40	40	40	33	33	33	33	33
Total ACL/OY	45	15	16	16	**33**	35	33	32	32	32	32	32
Catch	8	6	4	4	3	2	6	n/a	n/a	n/a	n/a	n/a
Stock Assessment	2019 operational assessment ASAP model Retro pattern decreased				Management Track Assessment, 2022 ASAP assessment model ● Larval index changed, now use SSB weights-at-age, tuned to spawning time vs survey time ● Used fixed selectivity equal to maturity ogive			WHAM assessment model, accepted by 2024 research track assessment Management Track Assessment, 2025 WHAM update ● Inclusion of the Gulf Stream Index (GSI) as an environmental correlate informing recruitment and dropping larval survey indices. ● Lognormal adjustment turned off (best practice guidance is to turn off) ● Removal of iid random effects on fleet selectivity, to resolve model convergence issues when additional years of data were added to the model configuration.				
Reference Points	Fmsy proxy = 0.355 SSBmsy (mt) = 1,779 MSY (mt) = 492				Fmsy proxy = 0.349 SSBmsy (mt) = 1,715 MSY (mt) = 461			Fmsy proxy = 0.374 (0.346-0.404) SSBmsy (mt) = 270 (42-1,720) MSY (mt) = 94 (15-595)				
Status	● Overfished. In rebuilding plan, rebuild by date is 2029 (70% Fmsy rebuild) ● Not Overfishing				● Overfished. In rebuilding plan, rebuild by date is 2029 ● Not Overfishing			● Overfished. In rebuilding plan; rebuild by date is 2029 ● Not overfishing				
Uncertainty	● Major retrospective pattern, recent low recruitment ● Poor performance of projections				● Recruitment (small 2021 uptick) ● Lack of adequate weight-at-age information in the terminal years of the assessment ● Missing 2020 surveys, low survey observations in recent years, and the continued major retrospective pattern ● If cold pool index continues to warm, recruitment and yield could continue to decline.			● Lack of biological data (length, age, and maturity) in the terminal years. The terminal five years of the assessment have no age composition data. ● The behavior of the Gulf Stream Index (GSI) in the future is difficult to predict. Recruitment is heavily driven by fluctuations in GSI, which makes recruitment difficult to accurately predict as well. ● Further development of the WHAM model is needed to be able to more appropriately consider zero values, which occur frequently in the recent time period for this stock.				
SSC's Rationale	Meeting October 2019: Static ABCs account for uncertainties				Meeting November 2022: ● Recommend CR Option 2 Frebuild at 70% Fmsy. ● Supported constant catch advice to reduce the risk of overfishing that may result from increasing the ABC. ● Projections may be overly optimistic given the stock's current biomass and observed recruitment failure. Projections likely driven by recent low fishing pressure, recruitment assumptions, and to a smaller extent the slight uptick in observed recruitment in 2021.			Meeting October 2025: ● Strong concerns about the assessment and projections. With no age data available for the past five years, the terminal year starting point for projections is highly uncertain and recruitment in the terminal year is based on the long-term average influenced by the recent decrease in the GSI. Uncertainty is compounded by WHAM not being able to handle zero values, i.e., values of zero in survey data as missing and indistinguishable from missing data due to survey gaps. Recruitment has been chronically low, and the reliance of setting future catch limits based on projected recruitment and "paper fish."				

Southern New England/Mid-Atlantic Winter Flounder (1 of 1)

	2021-2023			2023-2025			2026-2030				
Specs Year	**2021**	**2022**	**2023****	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
OFL	1,438	1,438	1,438	1,186	1,425	1,536	961	1,009	1,055	1,101	1,148
ABC	456	456	456	627	627	627	507	532	556	556	556
Total ACL/OY	288	288	288	441	461	439	487	511	534	534	534
Catch	210	219	136	136	164	194	tbd	tbd	tbd	tbd	tbd
Stock Assessment	Management Track Assessment, 2020 ASAP model, shifted from using a stock-recruitment relationship to estimate Fmsy to using F40% as an Fmsy proxy, changed to flat-tp pattern, revised MRIP data			Management Track Assessment, 2022 Updated ASAP, recruitment stanza to 2002-2021			Management Track Assessment, 2025 Update to ASAP model used in 2022				
Reference Points	Fmsy proxy = 0.284 SSBmsy (mt) = 12,322 MSY (mt) = 3,906			Fmsy proxy = 0.265 SSBmsy (mt) = 3,314 MSY (mt) = 1,025			Fmsy proxy = 0.233 SSBmsy (mt) = 3,144 MSY (mt) = 910				
Status	• Overfished (2023 rebuilding deadline, can't rebuild with F=0) • Not overfishing			• Not overfished. Updated stanza = no longer overfished, but stock in poor condition • Not overfishing			• Not overfished. Rebuilt as of 2022, but poor condition remains • Not overfishing				
Uncertainty	• Retrospective patterns occurred, but were lower than the 90% confidence intervals of the 2019 estimates of SSB and F. • Projection of future recruitment. • Natural mortality • No signs of rebuilding			• Projections and BRP calculations used a truncated stanza for recruitment (2002-2021 (last 20 years)) to reflect recent productivity • Led to a much-reduced biomass target resulting in the stock being no longer overfished and declared rebuilt • However, the perception of the stock did not change (still poor condition)			• Updated recruitment stanza (20-year moving window), making assessment more responsive to changes in productivity • Population projections are sensitive to the recruitment model chosen, as well as the temporal period selected from which recruitment estimates are drawn. • Recruitment and natural mortality are both likely to be dependent on environmental conditions, which cannot be explored within the ASAP framework. Investigations of environmental covariates within a state-space model framework are ongoing. • Few length data to characterize recreational discards (though a small component of the total catch). • Estimate of natural mortality is not well studied and is assumed to be constant over time. Uncertainty in the true max age			
SSC's Rationale	Meeting October 2020: • Recommended ABC CR Option C. • Low probability (~5%) of meeting rebuilding target by 2023, even with no fishing. • ABC is set to accommodate incidental bycatch while discouraging active targeting of stock. • OFL at F40%			Meeting August 2022: • SSC questioned if F40% remains a good proxy under a low productivity assumption or if Fmsy should be directly estimated. • SSB, recruitment estimates, and observed survey indices are at or near time series lows. • ABC based on 50% Fmsy.			Meeting October 2025: • SSC recommended 50% Fmsy held constant with year 3 ABCs (but not OFLs) held constant for years 4 and 5, based on substantial uncertainty in out-year projections, uncertainty associated with reference points, and poor indicators of stock health. • Projected catch, especially for 2029 and 2030, would be based largely on the "paper fish" –i.e., year classes that have not yet been observed. Estimated recruitment has remained low and steady over the past decade with only a slight increase at the end of the time series. The projected catch appears to assume continued improvements in recruitment that have not yet been observed.			

White Hake (1 of 2)

	2020-2022			2022
Specs Year	**2020**	**2021**	**2022****	**2022**
OFL	2,857	2,906	2,986	3,002
ABC	2,186	2,186	2,186	2,155
Total ACL/OY	2,019	2,019	2,019	1,990
Catch		1,947	1,761	1,761
Stock Assessment	2019 operational assessment Update to ASAP model			
Reference Points	Fmsy proxy = 0.1667 SSBmsy (mt) = 31,828 MSY (mt) = 4,601			
Status	● Overfished. ● Not overfishing			● Overfished. New rebuilding plan in 2021 ● Not overfishing
Uncertainty	● Strong retrospective in assessment that appears to be worsening. Rho adjustments were made for the determination of stock status and for initializing the projections (i.e., 2020) but not carried throughout the projections. ● Misidentified catch early in time series ● Added XL market category caused possible bias in age comp			
SSC's Rationale	Meeting Oct 2019 ● Stock use is high in recent years. ● Status changed to overfished, though at threshold			Meeting October 2021 ● For FY22, catch advice revised based on new rebuilding plan: Frebuild was 70% Fmsy.

White Hake (2 of 2)

	2023-2025			2024-2025		2026-2030				
Specs Year	**2023**	**2024****	**2025****	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
OFL	2,650	2,645	2,753	2,607	2,591	1,943	1,760	1,640	1,618	1,698
ABC	1,897	1,892	1,968	1,991	1,978	1,362	1,230	1,143	1,126	1,184
Total ACL/OY	**1,826**	1,923	1,816	1,923	1,816	1,294	1,169	1,086	1,070	1,125
Catch	2,009	1,754	1,802	1,754	1,802	n/a	n/a	n/a	n/a	n/a
Stock Assessment	Management Track Assessment, 2022 Update to ASAP model ● Added shrimp survey index.					Management Track Assessment, 2025 Update to ASAP model used in 2022 ● Added bottom longline survey (BLSS) spring and fall indices ● Re-aged catch using a combined NEFSC bottom trawl survey (BTS) and BLLS ALK for 2014–2024				
Reference Points	Fmsy proxy = 0.161 SSBmsy (mt) = 28,191 MSY (mt) = 4,186					Fmsy proxy = 0.176 SSBmsy (mt) = 25,004 MSY (mt) = 3,818				
Status	● Not overfished. In rebuilding plan, rebuild by date is 2031 (69% of Btarget) ● Not overfishing					● Not overfished. In rebuilding plan, rebuild by date is 2031 ● Not overfishing				
Uncertainty	● Species misidentification ● Do not assume autocorrelation be for long term projections ● Lack of recent white hake recruitment despite low harvest; potential signal of longer-term change for stock productivity. ● Poor characterization of catch and numbers-at-age ● Low sampling levels, missing 2020 surveys ● Major retrospective pattern ● Added XL market category caused possible bias in age comp					● Catch at age information is not well characterized, due to possible mis-identification of species in the commercial and observer data, particularly in early years, low sampling of commercial landings in some years, and sparse discard length data. ● Recent addition of an extra-large market category causing possible bias in the age composition ● Pooled age-length keys (ALKs) and use of survey ALKs to age commercial catch ● Possible seasonal movement out of defined stock area. ● Inconsistency between recruitment methods used in the long-term and short-term projections (explored in this assessment but not resolved).				
SSC's Rationale	Meeting November 2022: ● Recommended CR Option 2 Frebuild of 70% ● SSBmsy based on a cumulative distribution function of recruitment estimates from 1963-2019, whereas the projections are based on a CDF of recruitment estimates from 1995-2019. Use of different recruitment time stanzas may not be appropriate for the stock and leads to uncertainty about the outcomes of catch advice.			Meetings Sept, Oct 2023: ● For FY24-25, recommended basing projections using the two bridge years, autocorrelated long-term recruitment for the short-term projections, and 75% Fmsy. ● Stock making progress towards rebuilding.		Meeting October 2025: ● Stock had been making progress on rebuilding, though stalled recently. ● High use of stock by groundfish fishery; can be a constraining stock. ● Assessed stock status and condition do not well match industry perceptions of stock populations. ● Recommended ABCs follow the groundfish rebuilding control rule (70% Fmsy). The SSC considered there to be moderate uncertainty in the projections, but did not find sufficient biological nor socioeconomic justification to deviate from control rule by holding any out-years constant.				