

FMP **NORTHEAST MULTISPECIES (GROUND FISH)**
 STOCK(S) **Southern New England/Mid-Atlantic Yellowtail Flounder**
 LAST ASSESSMENT **2022 Fall Management Track**

Assessment Model, Terminal Year	Description of Assessment Model	Overfishing?/Overfished?	In Rebuilding Program?	OFL	ABC/ABC CR	ACL	ACT
ASAP, 2021	Statistical catch-at-age model; projections based on recent estimates of recruitment (age 1, 1990-2019) to reflect recent low levels of recruitment	No/Yes	Yes (2019-2029), Frebuild = 70%FMSY	184 mt in 2022	22 mt in 2021	21 mt in 2022	N/A for groundfish
<p>If the Cold Pool Index continues to warm, the ability for this stock to support the fishery is questionable. The most recent assessment calculated reference points assuming recruitment remained within the range observed since 1990, but if recruitment declines the already low biomass and yield estimates will decrease.</p>				MSY/OY	AMs	Discards	State Waters
				MSY = 461 mt	Inseason closures and lb-lb for commercial groundfish fishery; reactive area closures for scallop fishery	3.6 mt in 2021	0 mt in 2021
Availability of Biological and Assessment Data		Updated data since last assessment: survey indices of abundance (2020 NEFSC fall survey and 2021 NEFSC spring survey) and fisheries (commercial catches) data					
Recent Performance Against Harvest Control Rule		3.8% of the ACL was harvested in FY 2021.					
Current Management Program		The Total ACL is divided between several sub-ACLs and sub-components. The commercial sub-ACL is further divided between the sector sub-ACL and the common pool sub-ACL. The majority of commercial permits participate in 1 of 17 sectors, fishing under quotas. The common pool operates under days-at-sea, with trip limits and trimester TACs controlling catch. The scallop fleet receives a sub-ACL for SNE/MA yellowtail flounder. State waters and the other sub-component round out the final components of the total ACL. Landings and discards from all fisheries count against the applicable sub-ACL or sub-component, which are monitored throughout the year. If an overage occurs, an accountability measure is triggered for a subsequent fishing year.					
Variability in Catch/Revenues?		<p>Commercial Groundfish Revenue for SNE/MA yellowtail flounder (2020\$): \$0 million in FY2018, \$0 million in FY2019, \$0 million in FY2020; \$0.4 million 5-year average</p> <p>SNE/MA yellowtail flounder ex-vessel price/lb (2020\$/lb): \$2.19/lb in FY2018, \$1.81/lb in FY2019, \$1.37/lb in FY2020; \$1.2.67/lb 5-year average</p> <p>Total groundfish landings: 44.28 million pounds in FY2018, 42.66 million pounds in FY2019, 50.66 million pounds in FY2020</p> <p>SNE/MA yellowtail flounder catch (landings + discards): 14.7 mt in FY2018, 6.9 mt in FY2019, 3.3 mt in FY2020, 3.8 mt in FY2021</p> <p>The groundfish fishery catches a relatively equivalent amount of SNE/MA YTF each quarter of the fishing year (low seasonality to catch), with the exception of over 2 times the catch of any other quarter in the third quarter of 2018.</p>					
Data - Vessels, Permits, Dealers, Processors, Employment		FY 2020: 876 commercial groundfish permitted vessels, of those 590 vessels which received revenue from any species on a declared groundfish trip and 197 vessels with revenue from groundfish. 99 dealers reported buying groundfish.					
% Food, % Recreational		95% of the total ACL is allocated to the commercial groundfish fishery. The scallop sub-ACL has been set at 90% of the projected scallop fishery catch since FY2011. There is no recreational sub-ACL.					
Fishing Communities		The top 5 ports based on the Groundfish-Specific Commercial Engagement Indicator (2004-2020) are Gloucester, MA; New Bedford, MA; Boston, MA; Narragansett, RI; and Portland, ME. For scallops, the highest revenue ports are New Bedford, MA; Cape May, NJ; Narragansett/Pt. Judith, RI; and Gloucester, MA.					
Other Economic/Social Factors		<p>If the catch estimate indicates that the scallop fishery will catch less than 90 percent of the entire sub-ACL, NMFS will reduce the scallop fishery sub-ACL to the amount expected to be caught and increase the groundfish sub-ACL by up to the difference between the original estimate and the revised estimate. The increase in groundfish sub-ACL will be distributed to sectors and the common pool.</p> <p>ACE lease prices modeled using a hedonic price model from inter-sector leases for FY2016-2020: Inter-sector ACE lease prices from 2016-2019 have been around \$0.75-\$1/lb but spiked during the first quarter of 2018 to \$3.00/lb.</p>					
Major Sources of Scientific Uncertainty		The long-term outlook for the stock is uncertain. If the Cold Pool Index continues to warm, the stock may not be able to support a fishery.					
Major Sources of Management Uncertainty		Model results indicating increases in biomass may be a result of low fishing pressure and simulated recruitment but not adequately reflect the stock. Reference points were calculated assuming recruitment remained within the range from 1990, but if recruitment declines biomass and yield estimates will decrease.					
How is the probability of overfishing addressed?		SNE/MA YTF is in a rebuilding plan with a rebuild-by date of 2029. The plan sets Frebuild =70%FMSY. The FY2020 ABC (22mt) was held constant for FY2020-2022.					
What is the consequence of overfishing?		Reduction in biomass, yield, and net economic benefits over long-term; could also reduce scallop yield and harvest of other groundfish stocks in Southern New England.					
How are expected net benefits to the Nation currently measured/evaluated?		Yield (mt and \$)					
Interactions with Other Fisheries/Stocks, Bycatch Issues		The scallop fishery receives a sub-ACL of SNE/MA yellowtail flounder, but possession is prohibited in the scallop fishery. The sub-ACL is not a fixed percent of the total ABC, and is based on estimated scallop bycatch (90% since 2011) for the upcoming fishing year based on proposed scallop management measures. The scallop fishery AM (area-specific gear restrictions) is triggered either when the scallop fishery catch exceeds the sub-ACL by 50% or more or if the scallop fishery catch exceeds the sub-ACL by any amount and total catch exceeds the overall ACL.					
Ecosystem Considerations: Trophic Interactions		Amphipods and polychaetes are the main prey of yellowtail flounder, with occasional consumption of other benthic invertebrates and small fish (Johnson et al., 1999; Klein-MacPhee, 2002). Predators include Spiny Dogfish, Atlantic Cod, several skate species, and several other benthic piscivores (Johnson et al., 1999; Klein-MacPhee, 2002) NOAA/NEFSC Northeast Vulnerability Assessment					
Ecosystem Considerations: Habitat		Yellowtail flounder prefer sand and muddy sand. The Nantucket Lightship Area closure in southern New England provides protection for juvenile yellowtail flounder.					
Ecosystem Considerations: Climate		Yellowtail flounder is considered to have a low vulnerability to climate change (high climate exposure risk and low biological sensitivity), yet high distributional vulnerability driven by temperature. Recruitment of the southern stock has decreased and this has been linked to warming. The species has also shifted northward in recent years as temperatures have warmed. The environment for this stock is getting worse and causing expected recruitment to decline as the temperature increases in the region. If the Cold Pool Index continues to warm, the ability for this stock to support the fishery is questionable.					

Other Important Considerations/Notes

There are limited weight at age samples for SNE/MA YTF. The stock remains at low abundance despite low catches.