

Assessment Model, Terminal Year	Description of Assessment Model	Overfishing?/Overfished?	In Rebuilding Program?	OFL	ABC/ABC CR	ACL	ACT
VPA, 2021	Age-structured model	No/No	Yes 2004-2023, Assessment indicates rebuilt	1,116 mt in FY2022	823 mt in FY2022	787 mt in FY2021	N/A for groundfish
<p>The assessment for CC/GOM yellowtail flounder has a large retrospective pattern that causes a decrease in SSB and increase in F estimates when additional years of data are added.</p>				MSY/OY	AMs	Discards	State Waters
				MSY = 1,008 (696-1,554)	Inseason closures for commercial groundfish fishery; reactive lb-lb payback	89.5 mt in FY2021	26.3 mt in FY2021
Availability of Biological and Assessment Data		<p>Updated data since last assessment: commercial fishery catch data, survey indices of abundance (2020 survey indices assigned as missing and values were predicted by using neighboring observed values), MENH fall 2020 included as it was completed.</p>					
Recent Performance Against Harvest Control Rule		<p>47.2% of the ACL was caught in FY2019; 31.2% of the ACL was caught in FY2020; and 48.7% of the ACL was caught in FY2021.</p>					
Current Management Program		<p>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 sectors, fishing under quotas. The common pool operates under days-at-sea, with trip limits and trimester TACs controlling catch. 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 under certain conditions.</p>					
Variability in Catch/Revenues?		<p>Commercial Groundfish Revenue for CC/GOM yellowtail flounder (2020\$): \$0.4 million in FY2018, \$0.3 million in FY2019, \$0.3 million in FY2020; \$1 million 5-year average CC/GOM yellowtail flounder ex-vessel price/lb (2020\$/lb): \$1.21/lb in FY2018, \$1.15/lb in FY2019, \$0.91/lb in FY2020; \$1.43/lb 5-year average Total groundfish landings: 44.28 million pounds in FY2018, 42.66 million pounds in FY2019, 50.66 million pounds in FY2020 CC/GOM yellowtail flounder catch (landings + discards): 254.7 mt in FY2018, 231.4 mt in FY2019, 245.8 mt in FY2020, 383.6 mt in FY2021 The groundfish fishery catches slightly more CC/GOM YTF in the first quarter of the fishing year compared to the rest of the year. Catch is relatively steady during quarters 2-4.</p>					
Data - Vessels, Permits, Dealers, Processors, Employment		<p>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.</p>					
% Food, % Recreational		<p>95% of the total ACL is allocated to commercial fisheries. There is no recreational sub-ACL.</p>					
Fishing Communities		<p>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.</p>					
Other Economic/Social Factors		<p>Utilization of the stock has been low in recent years (under 50% since 2018). Inter-sector ACE lease prices were at or near \$0.00/lb in 2020 and 2021. In previous years, ACE lease prices were high at the start of the fishing year and declined to around \$0.00/lb in quarter four.</p>					
Major Sources of Scientific Uncertainty		<p>A large retrospective pattern that has persisted for a number of years and causes a decrease in SSB estimates and increase in F estimates when more years of data are added. Missing 2020 survey indices (the only 2020 survey data comes available is from the ME/NH fall survey).</p>					
Major Sources of Management Uncertainty		<p>The default management uncertainty buffer of 5% is applied to the commercial groundfish fishery. The lagged retrospective pattern and missing 2020 survey data contribute additional uncertainty when setting catch advice.</p>					
How is the probability of overfishing addressed?		<p>CC/GOM yellowtail flounder is in a rebuilding plan with a rebuild-by date of 2023. For FY2020-2022, the SSC recommended the lowest ABC (823 mt) be held constant for the specification period.</p>					
What is the consequence of overfishing?		<p>Reduction in biomass, yield, and net economic benefits over long-term; could also reduce the harvest of other groundfish stocks caught in the Gulf of Maine.</p>					
How are expected net benefits to the Nation currently measured/evaluated?		<p>Yield (mt and \$)</p>					
Interactions with Other Fisheries/Stocks, Bycatch Issues		<p>No sub-ACLs.</p>					
Ecosystem Considerations: Trophic Interactions		<p>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</p>					
Ecosystem Considerations: Habitat		<p>Yellowtail flounder prefer sand and muddy sand.</p>					
Ecosystem Considerations: Climate		<p>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.</p>					
Other Important Considerations/Notes		<p>An above-average 2016 year class and reduction in fishing mortality has resulted in the stock biomass increasing. CC/GOM yellowtail flounder is scheduled for a Research Track assessment in November, 2024 with other yellowtail flounder stocks.</p>					