

DRAFT 2021 OFL CV Decision Criteria Table for Golden Tilefish

Decision Criteria	Summary of Decision Criteria Considerations	Assigned OFL CV Bin (60/100/150)
Data quality	<p>Surveys</p> <ul style="list-style-type: none"> No fishery-independent survey data are available, but pilot fishery-independent surveys have been conducted in 2017 and 2020. Three commercial CPUE indices have been developed from longline fleet records: 1973-1982, 1979-1993, and 1990-2020. A VTR index has been updated with data through 2020. <p>Landings and discards</p> <ul style="list-style-type: none"> Historical commercial landings data are available since 1915. The assessment uses commercial landings data since 1970. Commercial discard estimates are low (1.2% of landings in the last five years), as is recreational harvest; neither was used as a component of catch removals in the assessment model. 	
Model appropriateness and identification process	<ul style="list-style-type: none"> The last full assessment was completed in 2017, using data through 2016. The most recent update in 2021 is a management track assessment (MTA) with expedited peer review. The assessment uses a forward-projection age-structured model updated with landings, catch-at-length distributions, catch-at-age and mean weight-at-age by using updated pooled and year-specific age-length keys, and commercial CPUEs through 2020. Increased availability of age data in 2021 allowed for the use of additional data within the pooled age-length key, and the use of year-specific age keys for the most recent years. The final model run used the updated pooled age-length key for years with age data gaps. The MSY estimate relies on a dome-shaped selectivity curve, which suggests a large portion of the population is not vulnerable to harvest. 	
Retrospective analysis	<ul style="list-style-type: none"> The final model run in the 2021 MTA had minor retrospective patterns in F, SSB, and age-1 recruitment. No retrospective adjustments were made to the assessment output. 	
Comparison with empirical measures or simpler analyses	<ul style="list-style-type: none"> The 2021 MTA identified qualitative metrics of stock status, including VTR-based CPUE trends, that concluded stock biomass has been increasing over time. Landings-at-length suggest a broad distribution of both younger and older fish in the fishery, with no evidence of size or age truncation in the most recent years of the time series. 	
Ecosystem factors accounted	<ul style="list-style-type: none"> Ecosystem factors were not incorporated into the 2017 assessment nor the 2021 MTA update. 	
Trend in recruitment	<ul style="list-style-type: none"> A recent large year class (2014) has started to recruit to the commercial fishery's large-medium market category in 2020. Another above-average year class likely occurred in 2017, but its size remains highly uncertain since it just began recruiting to the fishery. Estimates of recruitment to the fishery are very uncertain because there is a lack of information on the abundance of young fish in the 	

	commercial index and a lack of fishery independent surveys that capture young fish.	
Prediction error	<ul style="list-style-type: none"> • [Analysis in progress.] 	
Assessment accuracy under different fishing pressures	<ul style="list-style-type: none"> • F, SSB, and indices of recruitment have been relatively level for more than a decade. • SSB declined precipitously in the late 1970s and early 1980s, which was associated with a steep increase in F. A reduction in F in the late 1990s is associated with an increase in SSB to its current level beginning around 2010. 	
Simulation analysis/MSE	<ul style="list-style-type: none"> • No formal MSE-type analyses have been conducted for this stock. 	

Draft Narrative

The SSC notes consistency between input data and model dynamics, the available model diagnostics, and the lack of a pathological retrospective pattern. The SSC re-expresses its concern that the assessment relies solely on fishery-dependent data; the MSY estimate relies on a dome-shaped selectivity curve, which suggests a large portion of the population is not vulnerable to harvest. Increased availability of age data in 2021 allowed for the use of additional data within the pooled age-length key, and the use of year-specific age keys for the most recent years. The final model run used the updated pooled age-length key for years with age data gaps. The SSC notes that the probably low level of commercial discards and recreational catch of Golden Tilefish are currently unaccounted for within the stock assessment.