

Standing, Reef Fish, and Shrimp SSC Report



Shrimp Effort Threshold Reduction




Gulf of Mexico Fishery Management Council

August 20, 2018 Meeting

Corpus Christi, TX

Council Request and SEFSC Analysis


- Can shrimp effort be increased (i.e., threshold value reduced) without harming the resource, impeding rebuilding, or reducing the ABCs?



NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

**NOAA
FISHERIES**

THE IMPACT OF A REDUCTION IN SHRIMP EFFORT THRESHOLDS ON SEDAR 52 GULF OF MEXICO RED SNAPPER CATCH LIMIT PROJECTIONS



NOAA FISHERIES

Matthew W. Smith
Daniel R. Goethel

SSC Meeting
Aug. 2, 2018
Tampa, FL

Results

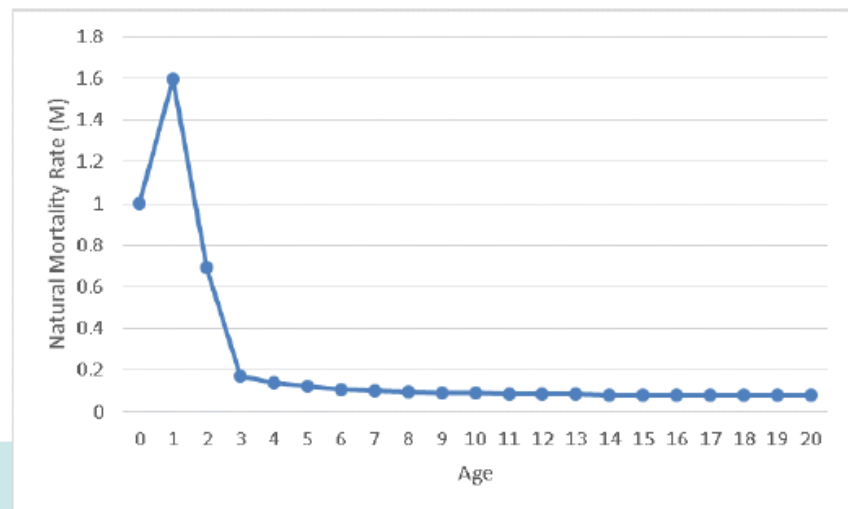
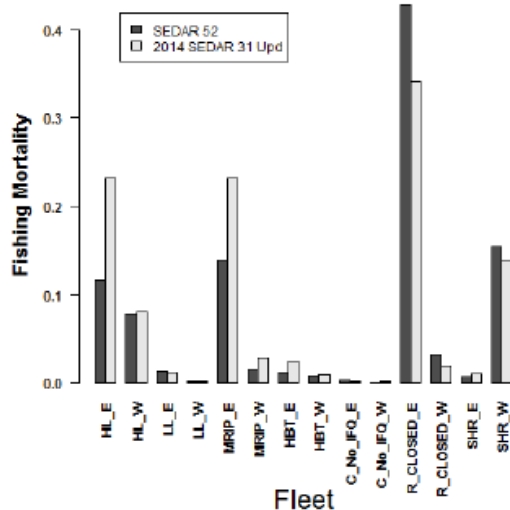
- Moderate changes in shrimp effort/days has little impact on ABCs or rebuilding
- Reverting back to effort levels associated with 2001 – 2003 would reduce ABCs by about 2.5 – 3 million pounds per year

Year	ABC					Assess_F_2001_2003
	SEDAR 52 Base	Reduce_60	Reduce_56	Reduce_40	Reduce_0	
2019	16.0	16.0	16.0	14.7	13.1	13.3
2020	15.0	15.0	15.0	13.9	12.5	12.7
2021	14.3	14.3	14.2	13.3	12.0	12.2
2022	13.8	13.7	13.7	12.8	11.5	11.7
2023	13.4	13.3	13.3	12.4	11.1	11.2
2024	13.2	13.1	13.0	12.2	10.7	10.9
2025	13.1	13.0	12.9	12.0	10.6	10.7
2026	13.0	13.0	12.8	12.0	10.5	10.7
2027	13.0	12.9	12.8	12.0	10.5	10.6
2028	13.0	12.9	12.8	11.9	10.5	10.6
2029	13.0	12.9	12.8	11.9	10.5	10.6
2030	13.0	12.9	12.8	11.9	10.4	10.6
2031	13.0	12.9	12.8	11.9	10.4	10.6
2032	13.0	12.9	12.8	11.9	10.4	10.6



Interpretation

- Why doesn't the shrimp effort threshold have a more substantial impact on ABCs?
 1. Recreational closed season fishing mortality now more substantial than shrimp bycatch fishing mortality and reduces impact of shrimp bycatch
 2. High natural mortality assumed for age-0 and 1 red snapper (i.e., those ages caught as bycatch in shrimp trawls) lessens impact of shrimp bycatch compared to older assessments (e.g., prior to SEDAR 31), because more fish are dying due to natural mortality before they are caught as bycatch



SSC Recommendation

- The SSC accepted the shrimping effort threshold reduction analysis provided by the SEFSC as BSIA
- Changing the shrimp effort reduction threshold to 60% in the area monitored for juvenile Red Snapper (stat zones 10-21, 10-30 fathoms) is unlikely to significantly impact yield streams associated with rebuilding Red Snapper by 2032

