Gag (Mycteroperca microlepis) life history for the Gulf of Mexico. Associations and interactions with environmental and habitat variables are listed with citations as footnotes.

Life stage	Eco-region	Habitat Zone	Habitat Type	Season	Temp (°C)	Depth (m)	Prey	Predators	Mortality	Growth
eggs[4,5,7,9, 13,19,24]	ER-1, ER-2	offshore	WCA	Dec-Apr		***50-120***				hatch in 45h at 21°C
larvae[13, 19, 21, 24, 31]	ER-1, ER-2	offshore	WCA	early spring		***50-120***				pelagic larval duration = 29-52 d
postlarvae[10, 13, 21, 31]	ER-1, ER-2	offshore	WCA			***50-120***				pelagic larval duration = 29-52 d
early juveniles[1, 2, 3, 6, 7, 13, 21, 23, 24, 28, 32]	ER-1, ER-2	estuarine, nearshore	SAV, mangroves	late spring-early fall	22-32	0-12	crustaceans (amphipods, copepods, grass shrimp)		minimal while in SAV	rapid during association with SAV
late juveniles[2, 3, 7, 11, 13, 15, 21, 23, 24, 26, 28, 32]	ER-1, ER-2	estuarine, nearshore, offshore	SAV, hard bottom, reefs, mangroves	recruit to reefs offshore in fall	22-32	1-50	decapod crustaceans and fish	cannibalistic, larger fishes	recreational fishery, shrimp fishery bycatch	
adults[2, 6, 9, 13, 15, 16, 18, 20, 22, 23, 24, 29, 34, 35]	ER-1, ER-2, ER-3, ER-4, ER-5	nearshore, offshore	hard bottom, reefs	year-round	14-24	13-100	fish, crustaceans, cephalopods	sharks	sudden low temps, fishing mortality; M = 0.1342	L_{inf} = 1277.95 mm FL, k = 0.1342, t_0 = -0.6687, max. age = 31 yrs
spawning adults[2, 4, 8, 9, 13, 14, 18, 19, 25, 27, 30]	ER-1, ER-2, ER-3, ER-4, ER-5	offshore	shelf edge/slope, hard bottom	Dec-May peak: Feb-Mar	21-30	50-120			spawning aggregations vulnerable to fishery	

Notes: Adults occupy artificial reefs in ER-2 and ER-3[33, 34]

Late juveniles: occupy artificial reefs in ER-2[34]

salinity = 28.8-37.6 ppt[3, 11, 13]

Postlarvae: successful larval transport into estuaries is dependent on oceanographic conditions[10]

Early Juveniles: salinity = 25.9-35.5 ppt[3, 13]

Early Juveniles: availability of estuarine habitat is critical to survival and growth[10]
salinity = 25.9-35.5 ppt[3, 13]

Spawning adults: annual fecundity estimated at 0.065 to 61.4 million eggs/female/year[27]

Bold and italicized font indicates proxy data