

Gag Grouper (*Mycteroperca microlepis*)

Description:

Gag grouper, or simply, “gag”, inhabits the western Atlantic and is typically found from North Carolina south to the Yucatan Peninsula. Coloration varies for gag depending on sex and size. In general, gag is a gray to light brown with darker wavy markings that create a marbled look on the sides of the body. Gag and black grouper look very similar. The key difference between the two is a bone on part of the cheek region called the preopercle. On a gag, it is angular with a serrated spur. Based on the most recent stock assessment, revised in October, 2021, (SEDAR 72 2021), the stock is considered overfished and experiencing overfishing.



Photo credit: NOAA Fisheries

Gulf Stock Characteristics: (SEDAR 72 2021)

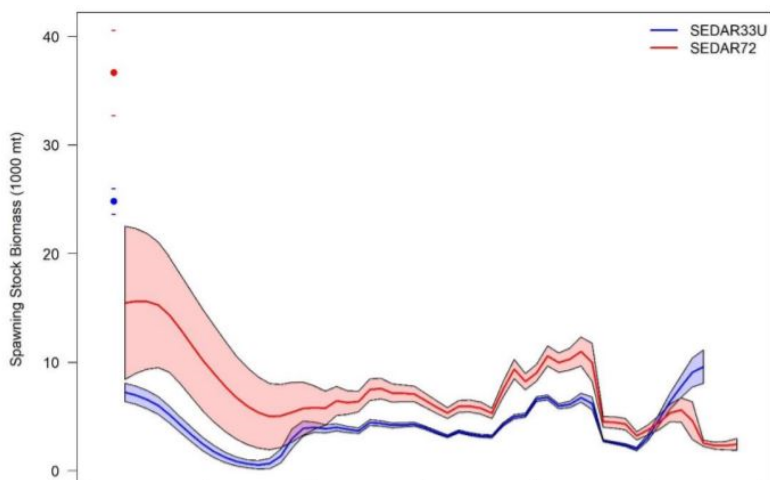
Natural mortality rate (M):	0.159 (Max age 33 years)
Reproductive maturity:	Age at 50% maturity predicted around 3.9 years (First age mature lowered from 3 to 2)
Maximum age:	33 years
Maximum weight:	80.5 lbs (36.5 kg) whole weight
Maximum length:	57.1 inches (145 cm) TL
Discard mortality:	12% recreational; 25% commercial

Life History and Distribution: (SEDAR 72 2021)

Adults prefer coastal water structures such as reefs and rocky bottoms at depths up to 500 feet (152 meters). Adults can be solitary or school in groups. Gag is commonly seen on rocky ledges in the Gulf of Mexico. Spawning season and peak spawn times vary by region. Female gag form aggregations offshore in late fall to early winter in nearshore habitats prior to spawning. Gag are broadcast spawners with external fertilization; meaning, males and females emit eggs and sperm into the water column during spawning. Juveniles shelter in seagrasses, mangroves and oyster reefs before they become old enough to migrate offshore. Gag display protogynous hermaphroditism, meaning they begin life as females first then a portion of the population transitions to male; this transition may be socially mediated based on size and sex ratio and is rather complex. The traditional 50% probability of being male was predicted around 11.6 years.

Current Regulations:

Gag has separate recreational and commercial annual catch limits (ACL). Sector allocation is 61% recreational and 39% commercial. The recreational ACL is 1,903,000 lbs gutted weight (gw). The commercial ACL is 1,217,000 lbs gw.



Estimate of spawning stock biomass (in 1000s of metric tons) and associated 95% confidence intervals for Gulf gag grouper.

Recreational sector:

24-inch TL minimum size limit and a daily bag limit of 2 gag per person per day within the 4 grouper per person aggregate bag limit.

Commercial sector: 24-inch TL minimum size limit; there is no daily trip limit. Commercial fishermen must possess allocation to fish for gag. Gag is managed under an IFQ program.