



GAG GROUPE

By
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Gag are a relatively common species of grouper in waters offshore of Louisiana, and are avidly pursued by both recreational and commercial fishermen. They are a mottled gray color with no outstanding distinguishing features. They are most similar to scamp grouper, but lack the streamer points that scamp have on their dorsal (back), anal (belly), and caudal (tail) fins, and the scamp's bright yellow markings around its mouth.

Because of its popularity and its biology, the gag are considered susceptible to overfishing. Gag, like many groupers, change sex, starting life as females and changing to males as they become older and larger. This means that there are fewer males than females in any population, so fishing pressure can affect one sex more than the other.

Gag have been well-researched on the South Atlantic coast, but very little work has been done on their biology in the Gulf of Mexico. One Gulf study, done in the late 1980s, took place off of the west central Florida Gulf Coast. A total of 1,331 gag ranging in size from 0.7 - 48.9-inches long were captured. Larger fish were captured by recreational and commercial fishermen from waters 119 to 594 feet deep. Smaller fish nearshore and in Tampa Bay were captured using seines, pushnets, hooks, traps and spearguns. All fish were weighed, measured and their age determined by counting the rings in their otoliths (ear bones).

Gag in the study increased in size as the water became deeper, out to 265 feet deep. For example, the average size was 20 inches at 33 foot depths and 40 inches at 265 feet. This may be due to more fishing pressure in shallower waters, or to the fact that gag migrate to deeper waters as they mature.

The oldest fish in the study was 21 years old and 45.6 inches long. The largest fish (48.9 inches) was 17 years old. Gag grew rapidly until they were 10 years old and an average size of 44 inches. From 10 to 21 years old, growth rates were very slow. Growth rates were most rapid the first year, with the average gag being almost 17 inches long by its first birthday.

Overall, females outnumbered males by more than six-to-one. Gag under 32 inches and five years old were all females. By 42 inches and 11 years old the sex ratio was about even. Between five and 11 years old, male fish were larger than female fish, most likely because the larger fish in each age group had changed sex from female to male. After 11 years old, the average size of males and females was about the same.

Females usually became mature enough to spawn between ages three and four. At four years old, 70 percent were mature. By age six, all females were mature. Spawning takes place between December and May, with a peak in February and March.

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