



## AMERICAN RED SNAPPER

by  
Jerald Horst

Red snapper, the glamour fish in the snapper family, are most common in the northern Gulf of Mexico, followed by the western Gulf and least common in southern Florida. Small and medium red snapper have a strong attraction to any sort of bottom relief or obstruction — reefs, rocks, ledges, wrecks, offshore oil and gas platforms, and even such small things on the bottom as pipeline valves and 55-gallon drums. As red snapper become larger, over 10 pounds, they seem to spend more time on relatively open bottom. Frequently, concentrations of large “sow” snapper over 20 pounds in weight are located on open, obstructionless, clay bottoms.

Red snappers are caught more frequently in shallow offshore waters in the cooler months than in the warmer months. This may be due to actual fish movement shoreward in the fall and winter, or to changes in feeding behavior of fish that are present year round. Red snappers are usually found in depths between 50 feet and 300 feet. Juvenile red snappers under 10 inches long live in shallower waters, over mud and sand bottoms.

These snappers spawn over 20 times a year at 4 to 6 day intervals between late May and early October, with a peak in June-August. Some red snappers mature at under one foot in length and they continue to spawn for the rest of their lives. Small fish will produce less than 500 eggs per spawn and large fish over 2 million eggs. Red snappers spawn in early evening. Their eggs and larvae are free-floating and at the mercy of currents.

Red snappers are often considered territorial fish that move infrequently as adults. Recent research has shown that red snappers may move around more than is commonly thought. In the late 1990s, researchers caught, tagged, and released almost 3 thousand red snappers in the northern Gulf. Almost 19% of these tagged fish were recaptured. Of these only about 26% of the fish tagged were in the same place one year later. The average tagged fish moved 18.6 miles before recapture. Tagged red snappers were found to move further and faster than ordinary when hurricanes affected an area. The longest distance moved was 219 miles.

Because red snappers are considered reef fish, it would be logical to assume that they eat smaller creatures from the reefs. Interestingly, most of their diet has been found to consist of creatures that live on mud bottoms. They get very little nutritional benefit from reefs. Fish are the number one item in their diet, with the most common ones being pipefish, snake eels, searobins, pinfish, striped anchovies, cusk eels, and pigfish. Stomatopods (king shrimp or sea lice) are the second most important food item, followed by several species of crabs. Also eaten are tiny pinhead-size zooplankton and bottom worms. Shrimp make up only a very small portion of their diet.

Their food habits change by season. Fish are always important, but crabs are the most common food item in spring and stomatopods are most important in the winter. A lot of stomatopods are also eaten in the summer, but almost none in the spring or fall. Diet also changes with fish size. As red snappers grow larger, they eat more fish. Also, the largest snappers, those 24 inches long and longer, eat far more stomatopods.

Red snappers also have daily feeding periods. One study showed that they had empty stomachs from 7:00 p.m. until 3:00 a.m. It seemed that the fish then began feeding heavily, reaching a peak at 4:00 a.m., but continued heavy feeding until 6:00 a.m.

Red snappers are a heavily regulated species with a relatively large minimum size. Undersized fish must be released, often to the distress of fishermen. Many of the red snapper caught, especially from deeper waters, have their stomachs protruding from their mouths, forced there by the expansion of gases in the air bladder as the fish are brought to the surface. Most fishermen assume that all of the fish released in such condition will die. Research indicates that, unless another bigger fish eats them first, that 70-80% of these fish will recover and survive. Only one thing will cause 100% of them to die — well intended fishermen poking a hole in the stomach with a knife or other sharp object to “help the fish swim down.”