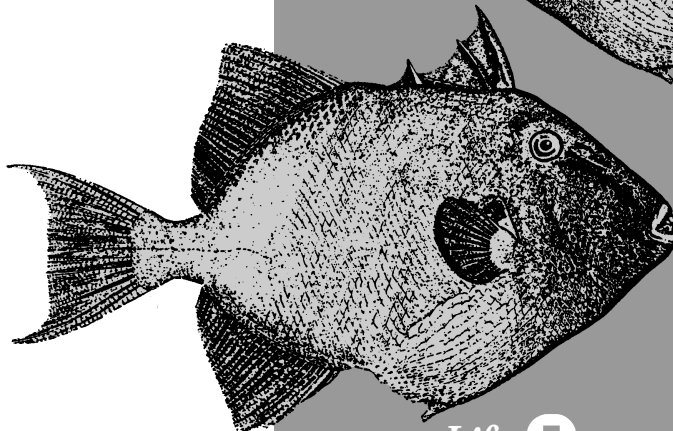
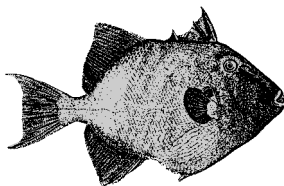
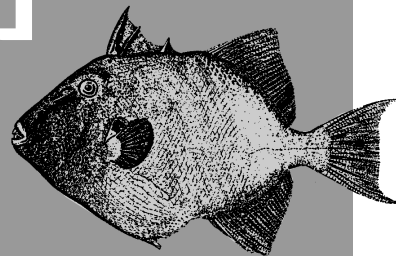




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Life
History
Of The **Gray
Triggerfish**



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Life History Of The Gray Triggerfish

The gray triggerfish, *Balistes capricus*, is one of the most abundant fishes along the northeast Gulf of Mexico. It is also one of the most unusual fishes in this region. They are not the typical streamlined fish, but are short and stout with very tough leathery skin. Triggerfish can weigh up to 13 pounds.

Eating Habits

Although the gray triggerfish looks strange, it is considered by many people to be one of the best tasting fish in the ocean. Why does triggerfish taste so good? This is a difficult question to answer and even more difficult to understand after looking at their eating habits. Studies of their diet show that triggerfish eat sand dollars and sea urchins, which do not seem very appetizing but which may give triggerfish their special flavor.

Feeding Behavior

In one study, triggerfish showed an interesting feeding behavior. Triggerfish moved away from the reef structure, where they usually live, and assumed a vertical position a few inches above the bottom. The fish then directed a jet of water at the sand with enough force to reveal sand dollars hidden just under the surface. If no sand dollar was there, the trigger moved about 1 yard away and continued this behavior until it located one. When the triggerfish exposed a sand dollar, the fish remained in a vertical hovering position and repeated the blowing action to further expose the sand dollar.

The triggerfish then darted in and grabbed the sand dollar with its beak-like teeth, lifted it about 2 yards above the bottom, and dropped it. The fish repeated this process until the sand dollar landed upside down. Again, it assumed a vertical position directly over the sand dollar, and with jaws closed, thrust downward, and crushed the center. The triggerfish then ate the soft inside. Triggerfish also locate and eat sea urchins in the same way.

Aggressive/Defense Behavior

Triggerfish exhibit fearless behavior and this fearlessness can go to extremes. For example, they seem to particularly like the earlobes of SCUBA divers. I have personally observed how they sneak up behind unsuspecting divers and take a nice bite out of their ear.

Triggerfish will also guard their eggs in the nest and will bite any divers that approach the nest. We have observed a school of red snapper trying to steal eggs from a triggerfish nest and watched with amusement at how the trigger was able to fend off the snapper.

Life Cycle

Triggerfish have an interesting life cycle. Triggerfish build nests on the bottom just like bass or bream and lay their eggs.

Upon hatching, the young fish quickly leave the nest and go to the surface. At the surface, they often associate with sargassum. Sargassum is the floating seaweed usually found in clear blue waters. Sargassum has a whole host of animals closely associated with it, but young gray triggerfish are one of the top eight vertebrate species found there. The amount of sargassum along the northeast Gulf of Mexico can vary greatly, and years of large amounts of sargassum may be years of a high survival rate of young triggerfish.

What happens after triggerfish leave the surface sargassum habitat in the fall? The juvenile fish (5 to 7 inches) move to reef habitat on the bottom, but little else is known about this transitional life stage.

The maximum age of triggerfish lies somewhere near 13 years. Most fish species can be aged with otoliths (ear bones) which have patterns that can be counted like annual rings on a tree. But otoliths from triggerfish do not show such patterns. However, sections of the dorsal spine have been used for aging triggerfish but this technique still needs validation.

