

Expressive Colors

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Dolphinfish can express their attitude effectively with colors. These brilliantly colored offshore gamefish have the ability to alter their color pattern to meet life's situations. Like the well known master of disguise, the chameleon lizard, many fish also have the ability to quickly change their color pattern. However, few express themselves as brilliantly as the dolphinfish.

Pattern changes seem to be triggered by life events and situations. Color cells, chromatophores, present in the skin are responsible for the color changes. The opening, dilation, and closing, constriction, of these cells create the different colors. It is likely that visual cues are largely responsible for initiating most pattern alterations, such as the appearance of a large predator, or a school of bait. Pattern changes can be quick with the transformation taking mere seconds. It may appear as a wave of color washing over the body.

Anglers are most familiar with the normal yellow-green and the silver-blue patterns. Fishermen with an eye for detail may have noticed the excited pattern. However, these masters-of-color changes possess a myriad of patterns to fit life's situations. With the help of fishermen and biologists, a few of these patterns are presented below. While some behavioral analysis is offered regarding the patterns, there is little hard evidence to conclusively define the fish's intent with each.

Juvenile Color Patterns

Dolphin utilize colors from a very young age in their effort to survive. By the time a juvenile dolphin is several days old it has developed a disruptive color pattern. The brown stripes across the body help the young fish hide among the Sargassum in its effort to elude predators.



(Photo Courtesy of SC DNR)

Yellow-green Pattern (with common variations)

This is the color pattern that comes to mind when dolphin are mentioned to fishermen. It is the normal color pattern observed by anglers in the majority of their encounters with mahi. This counter shading of emerald green above fading into bright yellow with brilliant blue spots serves the fish well in its normal activities. This pattern has many subtle variations from lighter patterns featuring white on the lower belly to darker patterns with brown to black covering much of the fins.

Muted phase



(Photo by Don Hammond)

Dark phase



(Photo Courtesy of TAMAR – IBAMA)

Light phase



(Photo Courtesy of Bradley Worten)

Under Water View



(Photo Courtesy of TAMAR – IBAMA)

Silver-blue “Invisible” Pattern

In the gin-clear waters inhabited by dolphin there is little structure available for fish to use to hide from predators. To compensate for this lack of hiding places, this adaptive fish developed a color pattern to simulate the clear waters and small particles commonly seen. This pattern could be interpreted as the “I am invisible” pattern used when caught in the open by a predator.



(Photo Courtesy of TAMAR – IBAMA)

Transition from Yellow-green to Silver-blue

Note the yellow-green remaining on fins and tail section.



(Photo Courtesy of TAMAR – IBAMA)

Excited “Neon” Pattern

Note the neon blue on the back, head and fins. This pattern presents some of the most brilliant colors exhibited in the fish world. Anglers hooking a large dolphin close to the boat will be treated to these brilliant colors but only in brief flashes and glimpses as the fish zips through the water and leaps into the air. It will also be seen when dolphin go into a feeding frenzy. Photographer Dino Barone of the Rock Boat Fishing Team out of Weston, Florida, provides a rare opportunity to leisurely study the bright colors of an excited dolphin in the photograph below.



(Photo by Dino Barone)

Sargassum/Flotsam Pattern

A review of scientific literature on dolphinfish did not reveal any report of this color pattern having been observed on dolphinfish from the Atlantic Ocean. This fish presents a distinct brown mottling in irregular patches, termed a disruptive pattern, similar to that of shadows cast by Sargassum or flotsam at the surface. Such a pattern would be very beneficial in eluding predators by disrupting their outline when under Sargassum or floating objects. This photo was provided by a biologist working with the Brazilian sea turtle program TAMAR – IBAMA. No information was available on whether Sargassum or flotsam was in the immediate area when the photograph was taken.

Sargassum/Flotsam Pattern



(Photo Courtesy of TAMAR – IBAMA)

Distress Pattern

This large bull displays a brown color pattern that appears to overlay the yellow-green pattern. It is seldom seen even by seasoned dolphin-anglers. Initially tagged for release, this fish was later boated when it was found to be deep hooked. It is likely that damage from the hook would have been fatal and the severity of the injury led to this coloration.



(Photo by Don Hammond, CSS, LLC)

Injury Pattern

The blackish-brown band running from the tag up the back to the top of the fin appeared immediately after the tag was implanted. Initially appearing to be blood, it actually is color present in the skin. Because the pattern runs in a specific direction as opposed to radiating out in all directions from the point of injury, this discoloration is likely controlled by nerves.



(Photo by Don Hammond, CSS, LLC)

Body language is a major communication form in the animal world. For fish, it takes the form of color patterns. Anglers can learn a lot about their intended quarry by paying attention to the color details.

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