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Growing over two feet in their first year of life, dorado live fast and die young. Prolific spawners, these colorful fish are relatively resilient to over exploitation.

DORADO (*CORYPHAENA HIPPURUS*)



Photo by Phil Zerofski

The dorado (*Coryphaena hippurus*), also known as the mahi mahi or common dolphin fish, is widely distributed throughout the tropical and subtropical ocean basins of the world. Because of their extensive range and prolific nature,

dorado support a wide variety of commercial, artisanal, and recreational fisheries around the globe. In the US, the dorado is a very important component of the recreational fisheries of the Southeast as well as the Hawaiian archipelago. During Southern California's summer and fall months, dorado typically infiltrate local waters, providing local anglers with a good chance of landing one of these exotic fish. California commercial and recreational landing estimates are highly variable from year to year because dorado are more prevalent during warm-water years, so estimates do not necessarily represent trends in regional abundance, as our waters lie on the northern extent of this fish's commercially viable range. Similarly, it is also not uncommon to have dorado virtually absent from the counts even during the peak of summer, with

only the rare catches made well south of the border.

Dorado are probably best known by fishermen for their close association with floating objects, which include kelp paddies, logs, and almost any type of debris. In many locations around the world, anchored and drifting buoys are deployed to help aggregate fish for exploitation. These floating structures are typically called fish aggregating devices or FADs and can be extremely effective in the aggregation of both tunas and dorado. Usually, in local waters it is the floating kelps that aggregate dorado. At times it may seem as if these exotics can be found under almost every kelp stringer along the coast. It has been suggested that dorado take shelter under marine flotsam because of the increased availability of prey associated with floating objects,

although other theories have also been proposed for this behavior. Since floating objects typically occur along oceanic fronts where adjacent water masses converge, creating areas of mixing and heightened productivity, one thought is that pelagic fish may associate with flotsam to track the patchy fronts of productivity within large areas of less productive blue water.

Brilliant colors, acrobatic fights, and an aggressive nature are well known dorado attributes. Gut-content studies have shown that they will prey on just about anything, including crabs, shrimp, squid, flying fish, puffers, pilot fish, triggerfish, sardines, jacks, and mackerel. An aggressive nature has proven difficult for aquaculture programs, as these fish are also known for their high rates of cannibalism.

Unlike most fishes, male and female dorado are easily distinguishable because of sexually dimorphic traits; females have rounded heads, and bulls (or flat-heads) have bony crests with square-shaped cranium. Males begin to devel-

op the bony structure at around 16 inches in length and can grow to a much larger size than the females. One other species within the genus *Coryphaena*, called the *Pompano dolphin fish* or *Pompano dorado* (*C. equiselis*), resembles the dorado (*C. hippurus*) very closely but only grows to less-than-half the size. Pompano dorado have a slightly more offshore distribution than do *C. hippurus*, and this species is rarely encountered in our coastal waters.

Age and Growth

Also well known for their rapid growth rates and high fecundity, dorado can grow up to 28 inches during their first year of life, with a single captive male in Florida documented to put on 35 pounds in just eight months. These fish have a relatively short life span, with the largest individuals tipping the scales at over 90 pounds at an early age of four to five years. Females reach sexual maturity in four to five months at an approximate length of 14 inches, while males mature at a slightly larger size.

Peak reproductive season for dorado varies with latitude; however, spawning can occur year-round when water temperatures are above 75 degrees Fahrenheit. Prolific spawners, females have been reported to spawn up to twice per day, producing up to one million eggs per event.

Rapid growth rates, high fecundity, and patchy distribution make these fish relatively resilient to over-exploitation, and the conservative regulation of only two dorado per angler per day in Mexican waters is another safeguard towards preventing localized depletion, reflecting the importance of the dorado to Mexico's sportfishing industry. Currently, the stock status in the eastern Pacific suggests that there is no evidence of over-fishing and that this species may be able to withstand relatively high rates of exploitation.

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