species specifics

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Photos by Craig Heberer

Jim Fujitani and a nice moonfish.

Opah (also called "moonfish") are large, colorful, deep-bodied fish that can reach a length of up to six feet and a weight of over 500 pounds. As a member of the order *Lampriformes* (along with around 50 species of crestfishes, ribbonfishes, and oarfish) there are just two species of opah making up the family *Lampridae*. The smaller of the two species (*Lampris immaculatus*; max size 3.6 feet) is found only in the southern hemisphere, primarily off of Chile and Argentina. *Lampris guttatus* is the predominant species captured in US fisheries and will be discussed here. This species is caught worldwide in tropical, subtropical, and temperate waters, where they primarily inhabit relatively deep waters during the day.

Their long, wing-like pectoral fins are used for sustained or cruise swimming, while lateral white muscle along the trunk powers a forked caudal fin for burst activity.

They have a scaleless body that is covered in silver spots with brightly colored fins. As do many species that reside at great depths, opah have relatively large eyes that are ringed with golden yellow.

Although little is known regarding opah movements off of the California coast, tracking studies off the Hawaiian archipelago have shown opah to have a similar depth distribution to swordfish and big-eye thresher sharks. This distribution entails daily vertical movements from relatively deep waters during the day (300 to 1,300 feet) to shallower depths at night (150 to 500 feet), a pattern common among visual predators that feed on organisms of the deep scattering layer.

Opah diet consists of squid, mid-water fishes, and invertebrates, including lanternfishes, lancetfishes, and krill. Its small, toothless mouth with highly protrusible jaws assists in prey capture.

Fisheries

Not the primary target of any large-scale fishery, opah do, however, comprise a valuable component of several commercial operations around the globe and are considered to be good table fare, with markets available for fresh, frozen, and sashimi-grade product.

Off California, opah are taken as an incidental species in the drift gillnet fishery for swordfish and are occasionally caught in the US Pacific albacore fishery. They're also a common catch in the Hawaiian long-line fishery, mainly on deep sets targeting big-eye tuna or swordfish. A steady increase in landings has been observed in the Hawaiian long-line fishery from around 2,000 opah caught in 1992 to a record high of 18,200 fish landed in 2009.

California recorded a total of 1.5 million pounds between 1990 and 1999, with average annual landings of around 150,000 pounds per year. In California landings reached a peak of 500,000 pounds during the hay-day of the drift gillnet fishery for swordfish and thresher shark (1982-1983, a time period that also coincided with a strong El Niño event).

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Even though opah are not commonly caught by recreational anglers, they seem to be showing up more frequently in the CPFV counts. These rare trophies are typically caught at depth while plunker-fishing for albacore or bluefin tuna; however, this year has witnessed several non-traditional catches, including a 143-pound opah caught in 60 feet of water off the coast of Orange County.

Conservation Status

Unfortunately, little is known about their life history, reproductive biology, or population size, making it difficult to determine the status of the stock. However, the solitary behavior and daily depth distribution make targeting opah in great quantity difficult; thus, it is likely that the opah is not currently threatened by commercial and recreational fisheries.

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