

# Opah

## History of the Fishery

Opah (*Lampris guttatus*) are taken commercially as an incidental catch in the drift gillnet fishery (94 percent), but are also captured in the high seas longline fishery (three percent) beyond the U.S. Exclusive Economic Zone (200 mile limit) off California. Prior to 1976, they were also recorded as incidental catch in the Pacific halibut, sardine, salmon, and albacore fisheries.

Between 1976 and 1989, only 1,660,856 pounds of opah were landed in California, with no landings in some years, and the largest landings following the 1982-1983 El Niño (516,126 pounds in 1984). Between 1990 and 1999, approximately 1,470,653 pounds of opah were landed in California, with annual landings ranging from 81,669 to 246,530 pounds. The highest landings of the decade occurred in 1998; once again associated with a warm water event (the 1997-1998 El Niño). Although the majority of opah landed in California since 1990 were landed from San Luis Obispo County south (about 50 percent from San Diego County alone), landings were reported as far north as Crescent City.

Sport fishermen targeting albacore from British Columbia to Baja California occasionally catch opah. Within California, many sport caught opah are taken from the northern Channel Islands south to the Coronado Islands, just below the U.S.-Mexico border. Anglers state that opah hit live bait or artificial lures with considerable fury.

Opah flesh is tasty, can be prepared in a variety of ways, and is excellent when smoked. The salmon-colored flesh, darker over the pectoral fin, is very fatty just below the skin but is otherwise rich, dry, firm and delicate.



Opah, *Lampris guttatus*  
Credit: J.B. Phillips

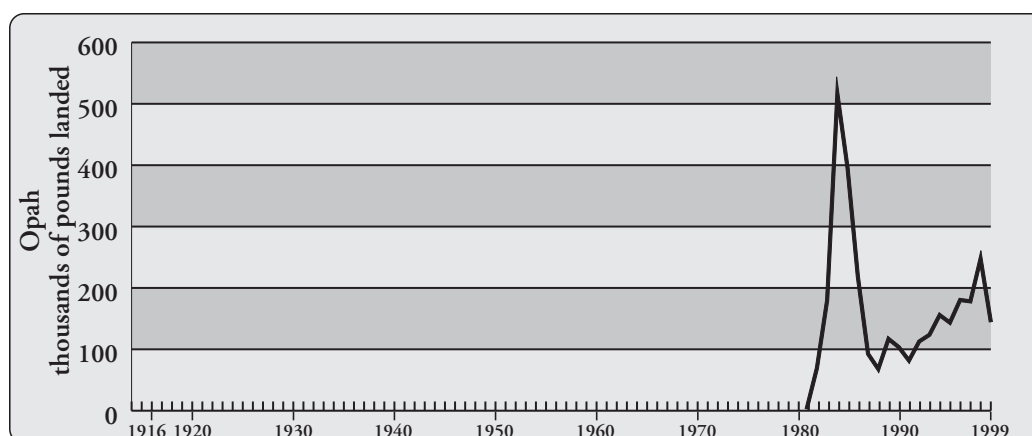
## Status of Biological Knowledge

One of two living species known within the Lampridae family, this species is most commonly referred to by its West African name, opah; however, it may also be called African pompano, giant pompano, Hawaiian moonfish, moonfish, mariposa or Jerusalem haddock. The genus *Lampris* is derived from the Greek *lampros* meaning radiant, while the species *guttatus* is likely derived from the Latin word for spot, *guttat*. The opah's laterally compressed, oval body is an iridescent, silvery-blue with round to oval white spots. The snout, lips and fins are a brilliant red. The bones of the small, toothless mouth are capable of protruding forward, forming an unusual upper jaw mechanism employed during feeding. The forked caudal fin and lateral red musculature likely function in low-speed swimming, the caudal fin and lateral white musculature in acceleration and the moderately long pectoral fins in maintaining normal cruising speeds. The modes of locomotion associated with the opah's musculature are well-suited to its pelagic lifestyle. Many pelagic fishes undergo periods of sustained swimming with intermittent bursts of speed used during activities such as feeding. The opah maintains neutral buoyancy by means of a functional air bladder and a skeletal structure of oil-filled, porous bones.

Opah occur worldwide in temperate and tropical seas. In the eastern Pacific, they occur from Chile to the Gulf of Alaska. All life stages of this species are pelagic and oceanic, occurring from the sea surface to a depth of 1,680 feet. Seasonal movements are not known in the northeastern Pacific, but in the northeastern Atlantic opah catch has been reported in the North Sea and waters off Iceland solely during the summer.

Little is known about opah reproduction. Spawning locations and seasons are unknown; however, a mature female was taken in the spring off California. Neither reproductive capacity nor the size of eggs is known. Very small opah, nearly one-half inch long, resemble miniature adults in body form, and have a complete set of fin rays. Fish up to eight inches in length are referred to as juveniles while those greater than 41 inches are called adults, although the exact size and age at maturity is unknown. Opah are known to grow to at least 54 inches in length, but have been reported to reach 72 inches. They are known to reach a weight of at least 160 pounds and have been reported to reach 500 to 600 pounds. The maximum age of opah is unknown.

The diet of larvae and juveniles is undetermined. As adults, opah are midwater predators that eat cephalopods, crustaceans and bony fishes such as anchovy, lancetfish, and cutlassfish. Aside from humans, predators of opah have not been documented.



**Commercial Landings  
1916-1999, Opah**  
Data Source: DFG Catch  
Bulletins and commercial  
landing receipts. Commercial  
landing data not available for  
Opah prior to 1976.

## Status of the Population

The size of the opah population, worldwide or off the coast of California is not known. Opah are probably solitary fish as few are encountered at any one time. It is not known whether local subpopulations exist or how far individual opah travel. Based upon trends over the last two decades, opah landings in California are likely to increase after El Niño events.

## Management Considerations

See the Management Considerations Appendix A for further information.

**Sarah D. MacWilliams**

California Department of Fish and Game

**M. James Allen**

Southern California Coastal Water Research Project

## References

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