FOCUS ON NATURE

MEDUSA YSTERIOUS

In 1989 a large jellyfish new to science began washing up on the shores of southern California beaches.

The animal, a scyphozoan jellyfish of the genus Chrysaora, began appearing in near-shore waters of our local beaches and bays in May 1989. A specimen was brought to the museum on August 25, 1989, that had been collected by Brian T. Hogue (son of Entomology Curator Dr. Charles Hogue) and Dee Golles, both lifeguards at Venice Beach. We immediately suspected that the jellyfish, which measured approximately two feet in diameter across the bell, had not been described previously. We found dozens of the jellyfish strewn along the shore when we visited Venice Beach later that week. Seaside residents and biologists from Malibu to San Diego and fishermen as far south as Bahía de San Quintín, Baja California, Mexico, have reported seeing the unusual jellyfish on beaches, in bays, and offshore near Islas de los Coronados, Baja California.

Until underwater video footage of a school of live jellyfish was provided by Mark Conlin (of Howard Hall Productions), it was thought that the jellyfish consisted only of a dark maroon bell marked by a light tan speckled pattern around the bell margin. The footage showed that the jellyfish has trailing arms and tentacles; in some large individuals they extend approximately fifteen feet behind the jellyfish as it swims horizontally through the water.

This species of *Chrysaora* is probably an offshore inhabitant that for unknown reasons is washing inshore to be beaten against rocky outcroppings. Garibaldis and other near-shore fish were seen feeding voraciously on the jellyfish's arms and tentacles, thereby further restricting their mobility and allowing the currents and wave surges to wash them ashore.





Focus on Nature is a new TERRA column that will highlight the incredible diversity of animal and plant life still found in southern California. Each issue will feature an example of a different species from the astonishing variety of habitats that surround one of the world's largest urban centers.

The fish may also have been feeding on associated animals seeking shelter in the jellyfish's arms. Many vertebrate and invertebrate animals occur in association with the jellyfish. The associates, some of which feed on the jellyfish and some of which are using it for shelter, may include sea spiders, amphipods, young crabs and shrimps, and fish. The new Chrysaora species harbored several invertebrate species that were not known to associate with jellyfish. We think that as the jellyfish become weaker and are brought inshore, they collect various forms of commensal and parasitic marine life as they drag along the bottom toward the shore. These invertebrates are of particular interest to the staff of the museum's Invertebrate Zoology section. The presence of these hitchhikers on the new species of Chrysaora may help to unravel mysteries about the distribution of these invertebrate animals and answer questions about their symbiotic behavior.

Any sightings or specimens collected of this jellyfish would be beneficial in understanding more about this new and unusual species. If the specimen can be brought immediately to the museum it should be put in a container of seawater. If not, it can be preserved in 10 percent formalin diluted with 90 percent seawater. If formalin is not available, the animals will keep in seawater for several days. They should be handled with great care. The jellyfish seems to have only a mild sting, but handling with gloves would be recommended. Field data are essential to the usefulness of the sighting and/or specimen. Please make note of the specific location, nearness to shore, time of day, date, water depth and temperature (if known) of the collection site, and the collector's name. You may reach the authors at the museum by calling (213) 744-3450.

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