

60.

Pices. 9/10/30

149590 ✓

REPRINT FROM

# CALIFORNIA FISH AND GAME

"CONSERVATION OF WILD LIFE THROUGH EDUCATION."

Volume 16

SACRAMENTO, JULY, 1930

No. 3

**Instituut voor Zeewetenschappelijk onderzoek**  
**Institute for Marine Scientific Research**  
Prinses Elisabethlaan 69  
8401 Bredene - Belgium - Tel. 059 / 80 37 15

## TAI AND CARP

By  
**LIONEL A. WALFORD**

## TAI AND CARP<sup>1</sup>

By LIONEL A. WALFORD

The importation into California of albacore from Japan, which has been going on since 1925, has ceased to be a novelty. Recently, however, another Japanese fish has been shipped in, this time not a fish of any commercial significance whatever to Americans; in fact, one not even known on this side of the Pacific. This fish is the Japanese *tai* (*Parargyrops edita*), a small fish about the size of a salt-water perch, beautifully colored with red and silver. The porgy family (Sparidae), to which this fish belongs, is represented on this coast by a Mexican *tai* (*Calamus brachysomus*) which is imported during the winter months for the Japanese trade. These fish are distinguished by the very steep

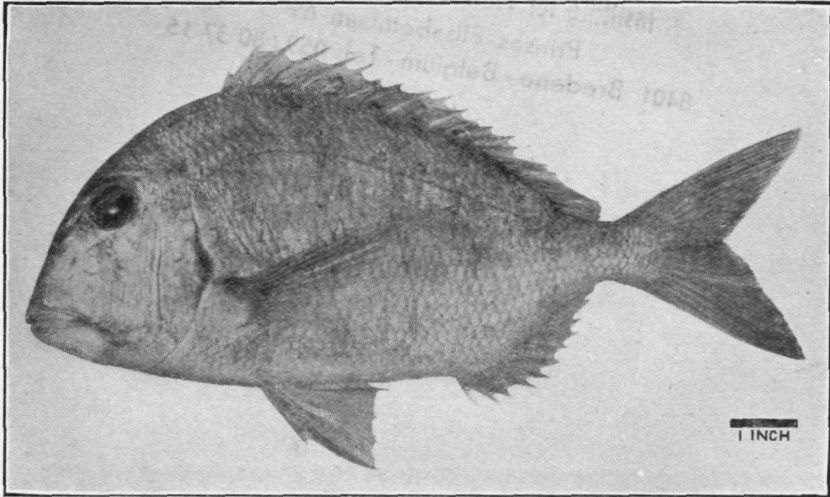


FIG. 74. The Mexican *tai*.

profile of the head; the outermost bone of the upper jaw (maxillary) slipping for most of its length under the edge of the preorbital (large membrane bone in front of the eye); the absence of teeth on the roof of the mouth; the presence of molar teeth on the sides of the jaws. The color of the Mexican form is plain silvery, but the several Japanese species are red, white or black.

It is the red one which is imported into the United States by Japanese people for their own use, for the *tai* in Japan—a land where fish are much respected and revered—is symbolic of happiness. In fact, the last syllable of the Japanese word for *merriment* or *happiness*, *mendetai*, is the same as the name of the fish. Moreover, the God of Happiness is always portrayed holding a *tai*. At parties, weddings, carnivals, and other auspicious occasions, this fish is the *pièce de résistance*, not only for its unsurpassed flavor, but also for its brilliant red color—even after cooking. Apart from the fish itself, the colors red and white are also sacred to the Japanese as a symbol of happiness.

<sup>1</sup> Contribution No. 94 from the California State Fisheries Laboratory. May, 1930.

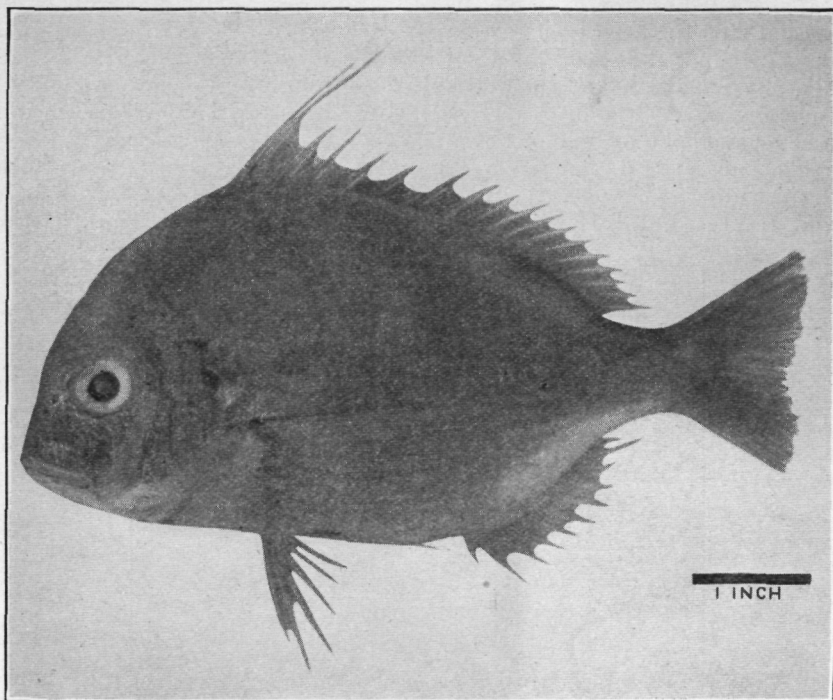


FIG. 75. The Japanese red *tai*, imported from Japan for festivals and parties

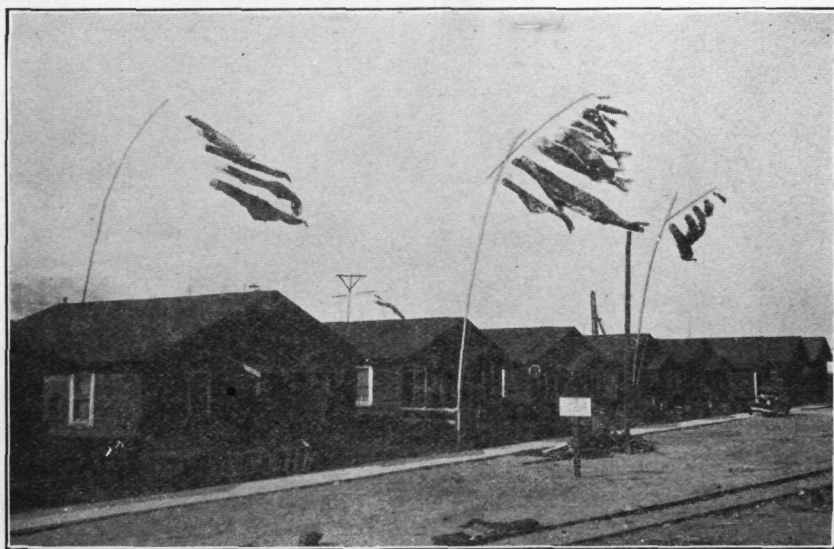


FIG. 76. Cloth flags made to resemble carp fly over each Japanese house where a boy baby has been born during the year. Photograph by R. S. Croker. May 5, 1930.

Japanese ladies, for example, wear white dresses with red ribbons to special parties; newly born babies are dressed in red; even the national flag is composed of red and white. It is said in Japan that if one accidentally catches a *tai* when seeking something else, good fortune will come his way. The black species is rarely used for parties, black being a color symbolic of ominous events.

The subject of Japanese reverence of fish reminds us of the carp, fish despised by so many California sportsmen, but by the Japanese admired and respected. Terminal Island, which forms the east bank of the

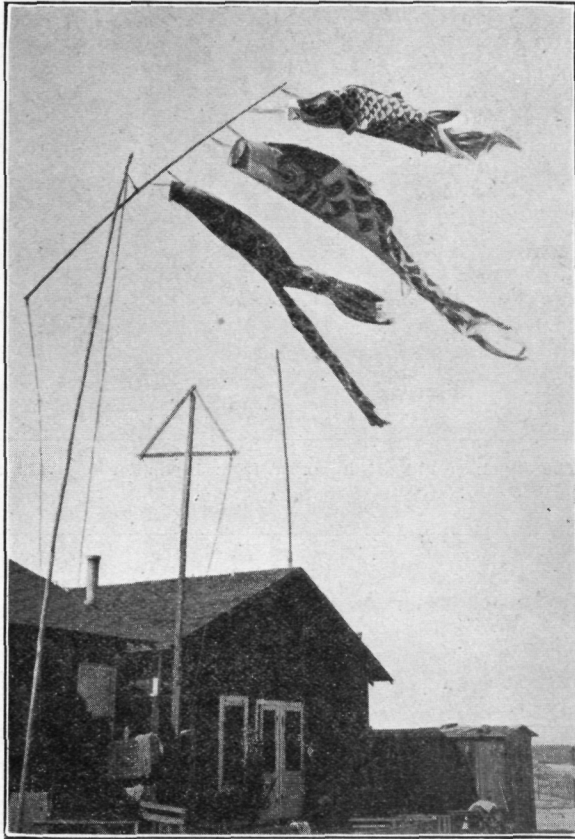


FIG. 77. Close-up view of cloth carp flying over Japanese house. Photograph by R. S. Croker. May 5, 1930.

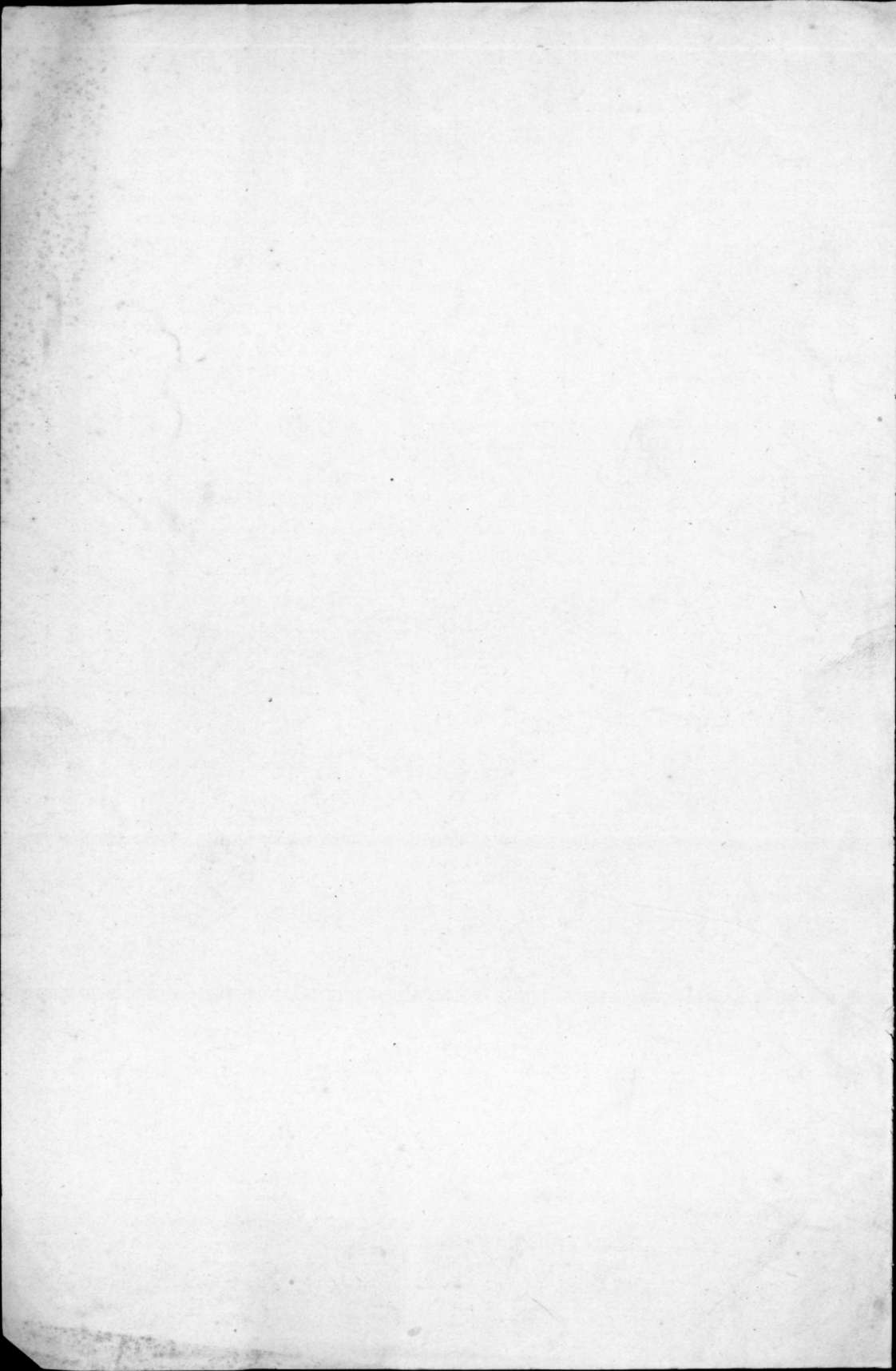
main channel of Los Angeles Harbor, is the location of an interesting and picturesque Japanese village, and the scene of many exotic Oriental celebrations. Between April 25 and May 5 of each year are seen all over the town hanging high above each house where a boy baby has been born during the year, cloth flags made to resemble carp. These flags, which cost from \$2 to \$15 each, are the gifts of friends and relatives. Thus, some houses hang out as many as ten or more fish, which dotting aunts, cousins, uncles and friends have donated. The flags are there to remind the people of the qualities which they want their boys



to emulate—the splendid qualities of the carp—strength, perseverance, endurance. During this same season the shop windows display arrays of brilliantly dressed dolls which are effigies of legendary heroes and warriors who have evidently observed the good traits of the carp. Brass-armored, fierce-looking fighters about whom ancient generations have woven tales of great deeds—giant slayings, tiger killings—figure prominently in the displays. A fat naked baby, noted for his prodigious strength, was *Kintoki*, whose image is a prominent feature of the doll collection. Another such baby was *Momotaro*, who achieved his birth by stepping out of a peach which a surprised old lady cut open one day.

Such interesting fish symbolism is not peculiar to Japanese people. Closely woven in the history of the ritualism and architecture of practically all of the religions and churches, including the Christian, and in folklore throughout the world, are bits of symbolism in which fish form an important pattern.

o



52 ~~87~~

Pics.

149592

REPRINT FROM

# CALIFORNIA FISH AND GAME

"CONSERVATION OF WILD LIFE THROUGH EDUCATION."

Volume 17

SACRAMENTO, JANUARY, 1931

No. 1

## Mexican Cabrilla and Groupers<sup>1</sup>

By

LIONEL A. WALFORD

Instituut voor Zeewetenschappelijk onderzoek  
 Instituut voor de Zeevisserij  
 Prinses Elisabethlaan 69  
 8401 Bredene - Belgium - Tel. 059 / 80 37 15

Each year since 1927, during the late autumn, winter and spring months, an increasing number of large, unfamiliar seabass has been imported from south of California. Although there are at least four different but closely related kinds of these fish, they have so far all been reported to the Division of Fish and Game by dealers as "Cabrilla." The buying public, however, and retail marketmen are not always willing to experiment with strange, unknown fish, and it has been necessary for wholesalers to invent seductive names like *golden bass*. Since these excellent fish are deserving of more dignified treatment and need no apology in the form of sugar-coated names, this opportunity is taken of formally introducing them by their official common names: the *groupers* and the *Mexican cabrilla*.

The sea-bass family (Serranidae), to which these fish belong, is represented in California by four species: The black sea-bass (*Stereolepis gigas*), which resembles the groupers not only in shape and color, but also in the great size which it attains; and three smaller kinds, the rock bass, (*Paralabrax nebulifer*), the kelp bass (*Paralabrax clathratus*), and the spotted rock bass (*Paralabrax maculatofasciatus*) which looks like the cabrilla in color. On the Atlantic coast and on the Gulf of Mexico, the groupers, jew-fishes and hinds resemble very closely their Pacific coast relatives, and are esteemed not only as food but are famous as game fish.

<sup>1</sup>Contribution No. 105 from the California State Fisheries Laboratory August, 1930. 84989

The sea-basses, an unspecialized group of fishes, are very difficult to describe for they have no clearly distinguishing characters. The ventral fins are attached below the pectoral fins; there is no bony support extending from the lower part of the eye across the cheek just under the skin; there are teeth in the center of the roof of the mouth; the dorsal fin is composed of spines as well as soft rays; the upper edge of the maxillary bone (the upper bone which forms the upper jaw) is exposed when the mouth is closed.

Of the Mexican forms which have been brought into California there are two types which may be easily recognized: One, the Mexican cabrilla, a closely spotted form comprising so far as we now know one species, *Epinephelus analogus*; the other type, the groupers, plain, dark-colored, obscurely or not at all spotted, including at least three species of the genus *Mycteroperca*. In this group, one species, the broom-tailed grouper (*Mycteroperca xenarcha*) can be readily distinguished by a toothed tail fin as contrasted to the even tail fins of the other species.

There are then these three names to apply to the large Mexican sea-bass: Mexican cabrilla, broom-tailed grouper, and grouper.

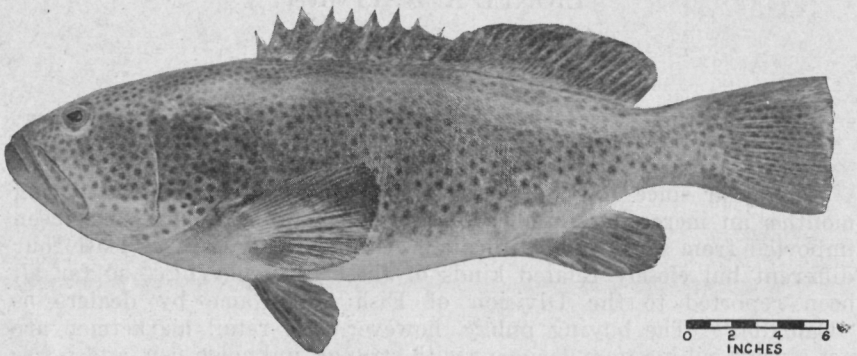


FIG. 10. The Mexican Cabrilla, *Epinephelus analogus*.

#### Mexican Cabrilla (*Epinephelus analogus*)

*Distinguishing characters:* The single dorsal fin, with usually 10 spines and from 16 to 18 soft rays; the spines being scarcely if at all higher than the soft rays, no one of them being noticeably higher than all of the rest; the anal fin having 3 spines and usually 8 soft rays; the teeth behind the outside row capable of being bent backwards. *Color:* Various shades of brown, the body being everywhere covered with small round dark spots; the sides with 5 or 6 faint dark cross-bars. Attains a weight of over 14 pounds. (See fig. 10.)



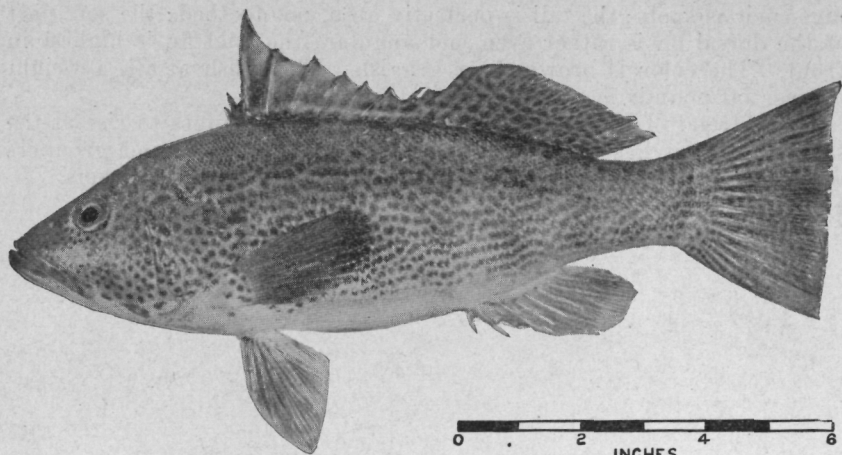


FIG. 11. The Spotted Rock Bass, *Paralabrax maculatofasciatus*, may at first glance be mistaken for the Mexican Cabrilla. (See Fig. 10.)

The spotted rock bass (see fig. 11), which is often taken in California waters, is a much smaller fish, and is easily distinguished from the Mexican cabrilla by the very high third spine of the dorsal fin, which is much over twice as high as the second spine, and higher than the fourth.

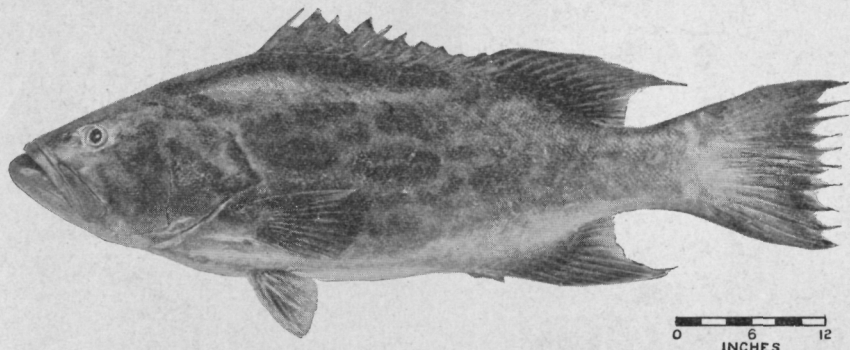


FIG. 12. The Broom-Tailed Grouper, *Mycteroperca xenarcha*.

#### Broom-Tailed Grouper (*Mycteroperca xenarcha*)

*Distinguishing characters:* The tenth soft ray of the dorsal fin, and the seventh soft ray of the anal fin are longer than the other rays, giving to the fins an angular appearance. In young specimens, the tail fin is perfectly even, but in older individuals, it becomes toothed as in the illustration (see fig. 12). *Color:* Light brown, the sides with obscure, large oval and oblong spots. Attains a weight of over 50 pounds.

#### GROUPER

Into this category may be placed those two or three species of sea-bass which have no distinguishing features on which to base quick identification. There is an absence of sharply contrasted color mark-

ings such as spots; the tail is perfectly even, not toothed; the soft part of the dorsal fin is rather even, not angular; the anal fin is highest in front. The color is brownish or grayish. These fish attain a weight of over 50 pounds.

If the trend of the total catch of these fishes continues to rise at the same rate as it has in the past few years, the cabrilla and groupers will become another great source of supply to our winter markets.

O