

White Seabass (*Atractoscion nobilis*)

Status of the Population:

White seabass population estimates have not been made (Leet et al. 2001). Fishery biologists have been concerned about the decline in landings since the late 1920s. Human-induced changes, such as pollution, overfishing, and habitat destruction, have probably contributed to this long-term population decline (Leet et al. 2001). However, natural environmental changes can also influence the population. The large numbers of small white seabass caught in recent years suggests that the warm water period beginning with the 1982-1983 El Niño helped to increase young fish survival (Leet et al. 2001).

There are indications that the white seabass population off California is recovering from low levels seen in the 1970s, 1980s, and most of the 1990s. Recent landings by sport and commercial fishermen have increased substantially and are approaching levels seen in the late 1940s and early 1950s; total landings for 2000 and 2001 each approached 1,000,000 pounds. In addition, recruitment of white seabass has increased significantly in the Southern California Bight in recent years. Young fish surveys conducted in southern California, as part of the Ocean Resources Enhancement and Hatchery Program (OREHP), showed a dramatic increase in the number of fish taken in research gillnet sets. During research work in 1997, over 600 juvenile fish were captured; in 1998 approximately 700 fish were taken, and in 1999 slightly over 1,300 juveniles were captured (Leet et al. 2001). The final OREHP sampling report for 2000-2001 showed 1,845 juvenile fish were captured during calendar year 2000, continuing the dramatic increase in juvenile white seabass. Anecdotal evidence from commercial and sport fishers also confirms this dramatic increase in juvenile white seabass. It is unknown whether this increase in juveniles will continue to enhance the adult spawning population (Leet et al. 2001).

Home Range/Migratory Patterns:

Nothing is known about the home range of white seabass. Information obtained from OREHP tagged and released juvenile fish shows that the fish are capable of moving at least 70 miles along the coast in a year. Releases of fish at Catalina Island and subsequent recoveries along the coast show they will move between the islands and the coast. The recent recovery at Catalina Island of a wild fish tagged along the coast shows movement is also possible offshore. Based on tag recoveries, it is apparent white seabass move considerable distances and this is probably the norm.

Current Regulations:

The Commission recently adopted and certified the White Seabass Fishery

Management Plan (WSFMP) and adopted White Seabass implementing regulations, which became effective August 30, 2002. These implementing regulations include several new provisions intended to ensure sustainable management of white seabass stocks off California. The WSFMP and regulations provide for an annual assessment and review process that involves both Department fisheries managers and scientific and industry advisors working together to fashion management recommendations for consideration by the Commission. The WSFMP provides a framework approach to management that enables the Commission to make quick adjustments to management measures if needed. The WSFMP also sets a total harvest limit (sport and commercial) of 1.2 million pounds to help ensure stocks are managed at sustainable levels and lists several trigger mechanisms aimed at identifying when overfishing of the white seabass stock occurs. Implementation of the WSFMP does not change regulations for white seabass that are currently in place.

Under current regulations, it is unlawful to commercially take white seabass between March 15th and June 15th south of Point Conception. Commercially taken white seabass must be at least 28 inches long. Gill net vessels are allowed to land one fish per day if taken incidentally during the closed season, and gill net mesh size must be a minimum of 6 inches in length.

The recreational size limit is also 28 inches total length. Three fish may be taken except that only one fish may be taken between March 15th and June 15th south of Pt. Conception.

Current regulations, along with augmentation of white seabass from OREHP, appear to be adequately protecting white seabass, especially when ocean conditions are appropriate for successful reproduction. The seasonal commercial closure and recreational limit reduction attempts to protect spawning fish. It has been noted, however, that many undersized fish are incidentally killed when released in the recreational fishery, and that "high-grading" (continuing to fish once a limit is reached in order to get larger fish) may also occur. This practice appears to be declining substantially on CPFVs due to peer pressure to avoid waste. Private boat anglers also appear to be less inclined to continue fishing after a limit is reached.

The recently adopted WSFMP will also protect white seabass stocks. However, the WSFMP cautions that more data and a formal stock assessment are needed to yield a more accurate harvest limit and a better defined harvest control rule. The Commission will review the WSFMP annually.

How MPAs May Help:

It could be expected that MPAs might protect populations of white seabass in areas which may be habitat identified as ideal for enhancing other populations of marine fin

fish. It has been suggested that white seabass spawn around rocky nearshore areas or near kelp beds (Thomas 1968), however, more current information from sport and commercial fishermen indicate that white seabass aggregate on inshore sandy bottom areas during spawning events where they become vulnerable to the heaviest fishing pressure. Therefore, to effectively provide some protection to these fish utilizing reserves as a management tool would require setting aside sandy bottom areas at the offshore islands. When not aggregated, traditional fishery management tools (size limits, bag limits, and seasonal closures) appear to offer more protection to white seabass than MPAs.