

WHITE SEABASS RESTORATION PROJECT

In the early 1960's, to begin restoring fisheries that have been depleted by commercial over-fishing, the use of gillnets, and habitat loss, the California Department of Fish and Game instituted the Oceans Resources Enhancement & Hatchery Program (OREHP). As part of the state's new initiative, the Hubbs Sea World Research Institute built an experimental marine fish hatchery in Carlsbad, CA. This pilot project was created in order to determine the feasibility of culturing ecologically respectable white seabass in captivity as well as to assess the marketability of these fish. **The white seabass was selected as the primary target species for this program due to both its popularity on dinner plates and its depleted status.**

The funding to support the majority of OREHP's stock enhancement research comes from the sale of recreational and commercial fishing licenses.

To support large-scale experimental restocking efforts, the Leon Raymond Hubbard, Jr. Marine Fish Hatchery, in Carlsbad, was constructed and dedicated in 1995. This facility is capable of producing more than 350,000 juvenile white seabass annually. The hatchery is a unique facility that blends scientific research to improve upon a depleted fishery and broaden our knowledge of the White Seabass (croaker) species and its life history.

At the hatchery, HSWRI (Hubbs-Sea World Research Institute) breeds white seabass and raises them from tiny eggs to fingerling (about three inches long). Juvenile white seabass go from a diet of brine shrimp to artificial pellets in order to get ready for their time in California Grow Out facilities.

All fish raised by HSWRI are tagged in the cheek with coded metal wires. Fisherman are encouraged to cut off and turn in the heads (at designated locations) of all caught White Sea Bass as the heads provide valuable information with regard to restocking efforts, and survivorship of hatchery raised fish verses non-hatchery raised fish.

Once the fingerlings reach 3 inches in length and are tagged, they are ready to be transported to Grow Out Facilities. Keeping to their natural hunting patterns, our white seabass are fed throughout the night by automatic feeders.

In less than three months, the fish nearly quadruple in size, from approximately three inches to almost twelve! (Ten inches is the minimum size for release). Once the fish are released, they are free to grow and reproduce in the wild.

SWYC Grow Out Pen Project/Facility:

In 1994, SWYC Angler Bob Woodard presented his idea of taking on this project, to the Anglers Board. It was approved and from there he went to the SWYC Board of Directors with a plan to build a White Seabass Grow Out Facility. It took approximately 18 months to raise the funds, get the permits and build the facility. Funds raised were inclusive of profits from our Bottom Fishing Tournament.

In 1996, with the efforts of SWYC Anglers Bob Woodard, Paul Doster, Harry Okuda, and several others, the White Seabass Grow Out Project for SWYC began. Angler Paul Doster was involved in the installation and maintenance of the infrastructure and he also designed and installed the pump system, piping, and electrical requirements. Paul still maintains that equipment, as needed. Angler Barry Rockwell did the engineering and drawings required for Port approval.

Several items were donated including the fiberglass tank for the fish. For the first several batches of fish, members of SWYC serviced the facility, particularly Frank McNiel who was very involved in doing this. Angler, Gene Geiger who still is in charge of our Marine Life Enhancement Program, has done a fantastic job managing this project for many years.

Our first batch of fingerling white seabass was received on August 6, 1996. On November 1, 1996, there were 1,749 healthy fish released. Within the first five years of the project SWYC Anglers released 12,328 fish. **As of December, 2009**, our SWYC Grow Out facility has released a total of **29,498** healthy white seabass!

For the success of this project and the safety of the fish, ongoing general maintenance of these pens is necessary. Divers clean the pens prior to receiving new batches of fingerling. Automatic feeders, pumps, and general equipment have to be maintained and replaced, as needed. Tanks are removed for repair and maintenance as required.

When we have fish in our pens they must be maintained and monitored twice daily and as a result, we have people we employ to provide that service.

As needed, chain link tops are replaced on each of the 3 gates. Our last chain link replacement was provided by Angler Tom Miller. Canvas tops are attached to the gates to protect the fish and they are replaced as needed.

When fish are received as well as when they are released several anglers volunteer their time to assist this process, to help ensure safe handling of our white seabass.

It is indeed a celebration when our fish are of size and ready to be released into the wild to grow into adulthood and reproduce. SWYC Anglers are proud to be associated with this Marine Life Enhancement Program.

