BROWN ROCKFISH

History of the Fishery

There is no regular monitoring of commercial landings of brown rockfish (Sebastes auriculatus); however, occasional large catches of brown rockfish do occur. In the San Francisco Bay area, freshly caught whole fish are in demand for sale in oriental restaurants.

The brown rockfish recreational catch from 1979 to 1986 averaged 296,000 pounds, or two to four percent of the total recreational rockfish catch in California. Northern and southern California catches are almost equal. In the Puget Sound area, brown rockfish are a major portion of the recreational catch.

Status of Biological Knowledge

Brown rockfish, sometimes called bolina rockfish, range from southeastern Alaska to central Baja California. They are widely distributed in shallow waters and bays, but have been taken to depths of 420 feet. Subadults are strongly residential to their home sites and often occur near piers and rocky points.

Both male and female brown rockfish begin maturing at about three years old, at which time they are around 10 inches long. Half of these are mature at five years old, when they are about 12 inches long, and all are mature by age ten, when they are about 15 inches long. A 12-inch female will have approximately 42,500 eggs, a 15-inch female 76,600 eggs, and an 18-inch female 266,000 eggs. Maximum adult size is 22 inches.

Brown rockfish, Sebastes auriculatus.

Brown rockfish, as do all rockfish, bear their young live. Females release larvae into the pelagic environment during December and January, and may do so again during May and June. The larvae remain in the pelagic environment until they transform into juveniles, after which they enter benthic habitats near shore. Benthic juveniles are known to inhabit shallow water habitats, often in bays, and to migrate to deeper waters as they grow older.

Brown rockfish feed on progressively larger prey as they grow. During their early benthic stage, juveniles feed on small crustaceans, amphipods, and copepods, but when they grow to around 5 inches, shift to crabs and small fish. Adult brown rockfish (greater than 12 inches) feed on larger fish, shrimps, and crabs.

Little is known about predation on brown rockfish, but probably it is similar to predation on other rockfish species. Presumably, they experience the most predation during their pelagic larval and juvenile stages, and less predation as they grow larger. Probably adults are only occasionally taken as prey.

Status of Population

Without regular monitoring of catch data, there is no way to assess the brown rockfish population size. Currently, there are no indications of stress on these populations.

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References


FISH RESOURCES