



YELLOWEYE ROCKFISH (*Sebastes ruberrimus*)



Yelloweye Rockfish are one of the largest rockfish species. They have red-orange to orange-brown bodies and distinctive bright yellow eyes. They are a long lived species. Roughly half are mature by about 20 years of age. This large, colorful species was a prized catch for both commercial and recreational fishermen with records of catch going back to the late 19th century. Catch records show the highest catches were from the late 1970s to the late 1990s. Yelloweye Rockfish were declared overfished in 2002 so retention of this species is currently prohibited. The stock is starting to show signs of rebounding, but recovery is slow for this long lived, late maturing species.

OVERVIEW

- **Oregon Conservation Strategy Species**
- **Size:** Up to at least 36 inches long
- **Weight:** Up to at least 27.8 pounds
- **Lifespan:** At least up to 147 years
- **Key Strategy Habitats:** Nearshore
- **Similar Species:** Vermilion Rockfish, Canary Rockfish

FISHING TIPS

- Yelloweye Rockfish was declared overfished in 2002, and the stock has yet to recover.
- This species is currently prohibited, and must be released!
- Remember to bring a descending device to release this species at depth!

FUN FACTS

Favorite Food: Fish, crabs, shrimp, squid, octopus, snails, and krill.

- Juvenile yelloweye have two white stripes that run the length of their body and their dorsal fins may have black or white fringes.
- Adult Yelloweye Rockfish are thought to be mostly solitary, spend substantial time sheltering in crevices, and have very small home ranges.
- Yelloweye Rockfish like high relief rocky bottom habitats.
- Adults have been found at depths from 36-1,800 feet, but most are found at depths less than about 600 feet.

RANGE AND DISTRIBUTION

In Oregon: Yelloweye Rockfish can be found throughout the state's marine waters.



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Everywhere Else: Yelloweye Rockfish range from the Aleutian Islands, Alaska to central Baja California. They are more common and abundant from the western tip of the Alaska Peninsula to central California.

LIFE HISTORY AND ECOLOGY

In all rockfish species, fully formed larvae are released from the mother's body and live for several months in the water column. Very little is known about the pelagic larval stage of this species and their first year of life. Small juveniles, 1-4 inches long, will settle on the bottom in high relief areas, often in nearshore waters.

Rockfish don't spawn; spawning refers to the release of sperm and unfertilized eggs into the environment. Rather, all rockfish species mate and have internal fertilization, but the process of courtship and mating has been observed for relatively few of the many species. Females Yelloweye Rockfish can produce up to 2,700,000 eggs a year. The eggs that are fertilized develop and are nourished in the womb. There is no placenta or other structure for transfer of nutrition and research suggests that the nourishment comes from dead embryos and undeveloped eggs that are reabsorbed into the amniotic fluid.

Yelloweye Rockfish can live to at least 147 years. All female Yelloweye Rockfish sampled off Oregon were mature by about 25 years old. Female Yelloweye Rockfish release their pelagic larvae from February to September depending somewhat on latitude with release being earlier further south. The long lifespan with an annual reproductive cycle helps to ensure that when the right combination of environmental conditions occur in the highly variable California Current system that a good year class of recruits are produced.

Although Yelloweye Rockfish are generally thought of as a solitary species, ODFW researchers have reported seeing groups of them in underwater videos collected off the Oregon coast and divers have also reported seeing groups of them in shallower rocky reefs off Oregon.

Known predators of Yelloweye Rockfish include other Yelloweye Rockfish, humans, and marine mammals such as Steller sea lions, killer whales, and sperm whales. Chinook salmon are known to eat the pelagic juveniles.

DIET AND FORAGING

Yelloweye Rockfish eat a variety of fish species including other Yelloweye Rockfish. They also eat crabs, shrimp, squid, octopus, snails, and krill.

HABITAT CHARACTERISTICS

Coastal waters usually less than about 600 feet deep with rocky bottoms. Adult Yelloweye Rockfish seem to prefer high relief complex bottoms with crevices, cracks, and caves.



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CONSERVATION AND MANAGEMENT

Threats: Yelloweye Rockfish that reside in the California Current Ecosystem benefit from the annual seasonal cycle that includes upwelling of cold nutrient rich waters during the spring and summer months, which are critical for ocean productivity. Changes in ocean productivity, whether they are human induced or natural, can affect reproductive success and stock size. Yelloweye Rockfish are also vulnerable to overfishing based on productivity and susceptibility analysis.

Conservation and management: Yelloweye Rockfish are included in the federal Pacific Coast Groundfish Fishery Management Plan administered by the Pacific Fishery Management Council (PFMC). The Oregon Department of Fish and Wildlife works in concert PFMC and manages fisheries for vermilion rockfish within state waters. The Pacific Fishery Management Council conducts stock assessments for Yelloweye Rockfish periodically for fishery management purposes. There is much still unknown about this species and there is an extensive set of research and data needs to improve conservation and management. Some of these needs include a fishery-independent survey in rocky habitats to get better information on abundance throughout its range, better information on stock structure, and genetic differences at a variety of scales throughout the species range. Almost nothing is known about their pelagic larvae and larval dispersal.

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