



# GRASS ROCKFISH (*Sebastes rastrelliger*)



Grass Rockfish are a shallow water species. They live on or near the bottom. They are generally a solitary species. Grass Rockfish range in color from green to reddish brown, to almost black. They generally have black spots and blotches. They are a spiny and heavy bodied fish. Their habitat is limited to shallow waters. They are a component of both recreational and commercial fisheries, and have a long history in these fisheries. Grass Rockfish are often sold to the live fish market by commercial fishermen as the price is higher for live rockfish than for fresh rockfish.

## OVERVIEW

- **Oregon Conservation Strategy Species**
- **Size:** Up to 22 inches long
- **Weight:** Up to 6.4 pounds
- **Lifespan:** At least 23 years
- **Key Strategy Habitats:** Nearshore
- **Similar Species:** Brown Rockfish

## FISHING TIPS

- Start in the morning.
- Target shallow rocky reef areas.
- Drop your hook to the bottom, and fish right near the rocks.
- A variety of lures and flies work well.
- Remember to check the fishing regulations for the area before you go and be sure you have your fishing license.

## FUN FACTS

**Favorite Food:** Small fish and bottom living invertebrates such as crabs, shrimp, amphipods, snails and octopus.

- Grass Rockfish have been observed to rapidly change color. They have turned white when placed in a white bucket.
- Grass Rockfish mature at about 2 to 5 years of age.
- Females can produce up to 760,000 eggs.
- Live Grass Rockfish can be found at many Asian restaurants in the larger cities on the west coast. Some may let you pick the fish you want to eat!

## RANGE AND DISTRIBUTION

**In Oregon:** Grass Rockfish can be found throughout the state's marine waters, but are more common off southern Oregon.



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**Everywhere Else:** Grass Rockfish range from Vancouver Island to central Baja. They are more common and abundant from southern Oregon to northern Baja. Adults are known to live at depths from tide pools to 150 feet, but they are more common from the intertidal to about 50 feet.

## LIFE HISTORY AND ECOLOGY

Grass Rockfish mature between about 2 to 5 years of age. The size at maturity seems to vary with location, with fish further north being slightly larger. They can live to 23 years. 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. Female Grass Rockfish can produce 80,000-560,000 eggs each year. The developing embryos get substantial nourishment that does not come from the egg itself. 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. In all rockfish species, fully formed larvae are released from their mother's body to live for several months in the water column. Very little is known about the pelagic larval stage of this species, but they settle out as juveniles at lengths of about 1 inch or smaller in tide pools and shallow rocky bottom areas. There is some genetic research that suggests there may be limited larval dispersal for this species. Female Grass Rockfish release live young from about January to March all in one batch. The long lifespan with annual and 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.

Adult Grass Rockfish seem to prefer complex rocky bottoms with cracks and crevices as well as areas with vegetation.

Documented predators of Grass Rockfish include fish and humans. Grass Rockfish are caught on recreational bottom fishing trips off Oregon and by shoreline fishermen. They are also taken by commercial fishermen and many are sold live. Live fish prices are considerably higher than for freshly caught fish that are landed dead. Live fish are sold in many Asian restaurants in the bigger cities on the west coast.

## DIET AND FORAGING

Grass Rockfish eat small fish and bottom dwelling invertebrates such as crabs, shrimp, amphipods, snails, and octopus.

## HABITAT CHARACTERISTICS

Coastal waters usually less than 50 feet deep with rocky bottoms. Adult Grass Rockfish seem to prefer complex rocky bottoms with cracks and crevices.



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## CONSERVATION AND MANAGEMENT

**Threats:** Grass 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. Grass Rockfish are also vulnerable to overfishing based on productivity and susceptibility analysis.

**Conservation and management:** Grass 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 Grass Rockfish within state waters. The Grass Rockfish population has only been assessed using what are called “data-poor” methods. 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 nearshore rocky habitat 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. There is also limited information available on the life history of this species. Almost nothing is known about the pelagic larvae or their dispersal.

## REFERENCES

- Buonaccorsi, V. P., M. Westerman, J. Stannard, C. Kimball, E. Lynn, and R. D. Vetter. 2004. Molecular genetic structure suggests limited larval dispersal in grass rockfish, *Sebastes rastrelliger*. *Marine Biology*. 145:779-788.
- Love, M. S., M. Yoklavich, and L. Thorsteinson, 2002. The rockfishes of the Northeast Pacific. University of California Press, Berkeley, Los Angeles and London.
- Love, M. S. 2011. Certainly more than you want to know about the fishes of the Pacific Coast: a postmodern experience. Really Big Press, Santa Barbara, CA.
- <https://www.pcouncil.org/stock-assessments-star-reports-stat-reports-rebuilding-analyses-terms-of-reference/groundfish-stock-assessment-documents/>
- [https://www.pcouncil.org/managed\\_fishery/groundfish/](https://www.pcouncil.org/managed_fishery/groundfish/)
- <https://myodfw.com/sport-bottomfish-seasons>