



# KELP GREENLING (*Hexagrammos decagrammus*)



Kelp Greenling have elongated bodies with 2 cirri, or thin tufts, above each of their yellow eyes. Coloration varies with age, gender, and season. Males and females are colored differently and the coloration of individuals can change during the breeding season. Young fish can be reddish, yellow-brown or gray with dark mottling. Males are typically brown-orange or red-purple with blue spots, but courting males are usually gray with blue spots. Females are gray or brown with yellow spots and fins. Variations on these color schemes are sometimes seen.

## OVERVIEW

- **Oregon Conservation Strategy Species**
- **Size:** Up to 25 inches long
- **Weight:** Up to 4.6 pounds
- **Lifespan:** Up to at least 25 years
- **Key Strategy Habitats:** Nearshore, Estuaries
- **Similar Species:** Painted Greenling, Rock Greenling.

## FISHING TIPS

- Start in the morning.
- Target rocky reef areas.
- Drop your hook to the bottom, then reel up slightly.
- A variety of baits, 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:** Things near the bottom including brittle stars, crabs, shrimps, amphipods, worms, snails, fishes, and fish eggs.

- Females lay sticky eggs on the bottom in masses that range from about golf ball to tennis ball size.
- Males guard up to 11 egg clumps in their “nests” that may be from more than one female.
- “Sneaker” males don’t guard eggs, but try to deposit sperm on eggs when the male guarding the nest is not looking.
- Males are territorial throughout the year with females less being less so.
- Kelp Greenling are usually solitary.

## RANGE AND DISTRIBUTION

**In Oregon:** Kelp Greenling can be found throughout the state’s marine waters and in estuaries.

**Everywhere Else:** Kelp Greenling range from the Aleutian Islands to southern California. They are more common from the Aleutian Islands to central California. Kelp Greenling can be found from tide pools to depths of about 800 feet, but are more common in depths less than about 330 feet.



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## LIFE HISTORY AND ECOLOGY

Female Kelp Greenling lay sticky eggs in “nests” usually on encrusting material in rocky habitats, but sometimes on bare rock, in water depths from just subtidal to about 56 feet. Females lay three or more batches of eggs totaling between 28,000 and 125,000 eggs per season. The spawning season is from July to January, with most eggs being laid in Oregon waters during the fall months. Males may guard up to 11 eggs masses that may be laid by more than one female in the male’s “nest” area which can be up to about 75 square feet in size. This allows some males to use an alternate reproductive strategy. These “sneaker” males don’t establish or guard nests, but rather deposit their sperm on eggs when the male guarding the nest is not looking. Embryos hatch after about a month. The larvae live as plankton in the water column for several months before the young settle to the bottom in nearshore shallow waters including tide pools when they are about an inch or two long. Kelp Greenling grow quickly during their first 3 years, then growth slows dramatically. Kelp Greenling are generally solitary fish that live on or very close to the bottom.

Known predators of Kelp Greenling include Black Rockfish, Cabezon, Lingcod, salmon, skates, Common Murres, Pigeon Guillemots, Puffins, and Steller sea lions. Humans also eat Kelp Greenling. There is a long history of use by Native Americans and they are caught in both recreational and commercial fisheries in nearshore waters. They do well in captivity and are highly valued in the commercial fishery that supplies live-fish primarily to Asian restaurants along the west coast.

## DIET AND FORAGING

Kelp Greenling eat a variety of items including: brittle stars, worms, shrimps, crabs, snails, fish species, and fish eggs. They concentrate their foraging activities on or near the bottom.

## HABITAT CHARACTERISTICS

Kelp live in rocky habitats including manmade structures such as jetties. They are found both in the nearshore ocean and in estuaries.

## CONSERVATION AND MANAGEMENT

**Threats:** Kelp Greenling are thought to be of low concern for overfishing. Their nearshore lifestyle also puts them in habitats that can be heavily influenced by human activities.

**Conservation and management:** Kelp Greenling 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 within state waters. The Pacific Fishery Management Council conducts stock assessments to ensure that fisheries for this species are sustainably managed. There is an extensive list of research recommendations that



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include: fishery-independent surveys to provide better information about abundance and distribution; defining stock structure; and better information on catch and effort.

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