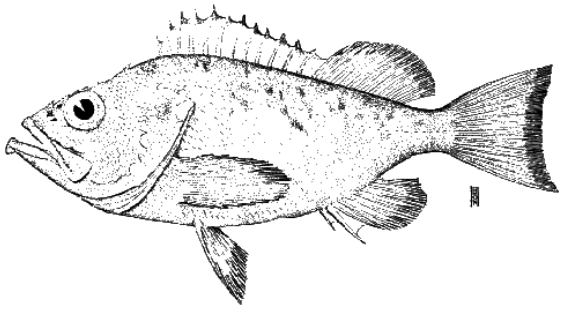
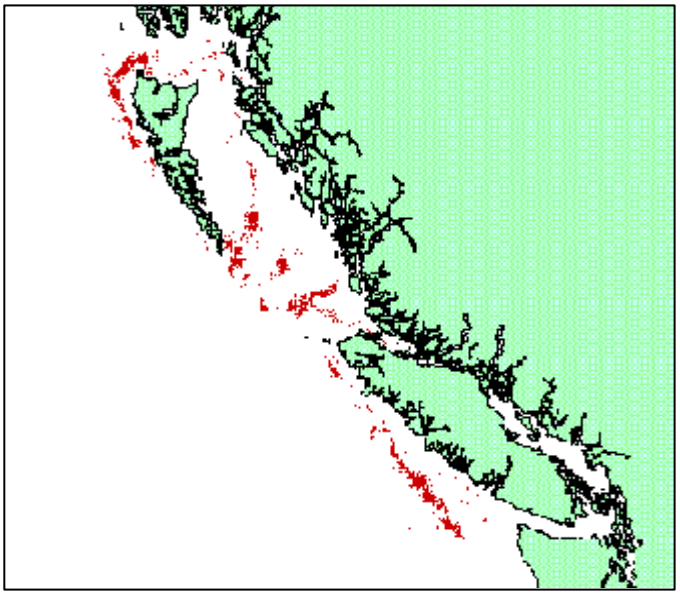


Sebastes aleutianus

Rougheye Rockfish
British Columbia Coast



Canadian trawl catch locations of rougheye rockfish in British Columbia, 1996-98.

Background

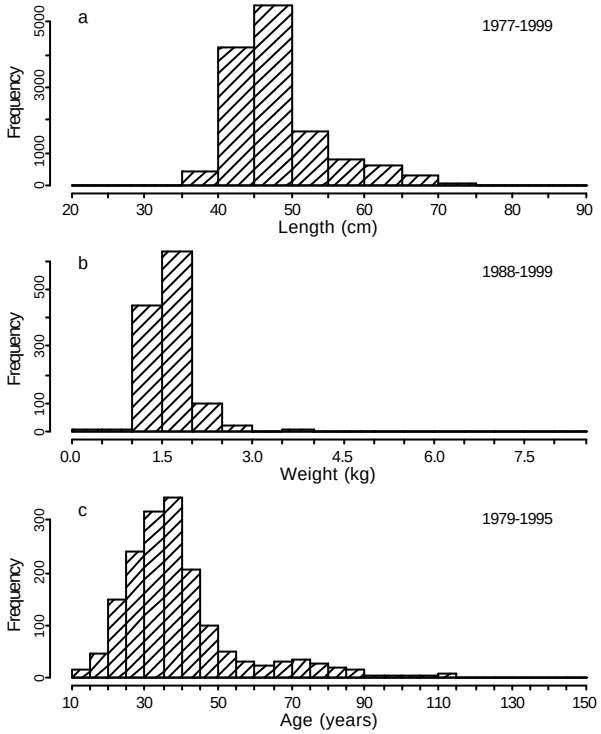
Rougheye rockfish (Sebastes aleutianus) are an important component of the trawl and hook-and-line fisheries of British Columbia. The species ranges from Japan and the Kamchatka Peninsula to the Bering Sea and Aleutian Islands, and down to southern California. They occur along the continental shelf slope at depths as shallow as 25 metres and as deep as 2,830 metres. Larger fish tend to lead solitary lives and live deeper than smaller fish, which form small schools. The preferred habitat consists primarily of boulder fields.

Very little is known of the biology of this species. Rougheye rockfish appear to be the longest lived of any of the B.C. rockfish, with one recorded case of a 147-year-old. Adults reach a maximum length of 90 cm. Approximately half of all males are mature at 40-45 cm, females at close to 47 cm. Both males and females are approximately 20 years old at 50% maturity. The principle spawning period off B.C. is in April. Fertilized eggs remain within the ovary until larval extrusion and may obtain at least some of their nutrition from the female parent during development.

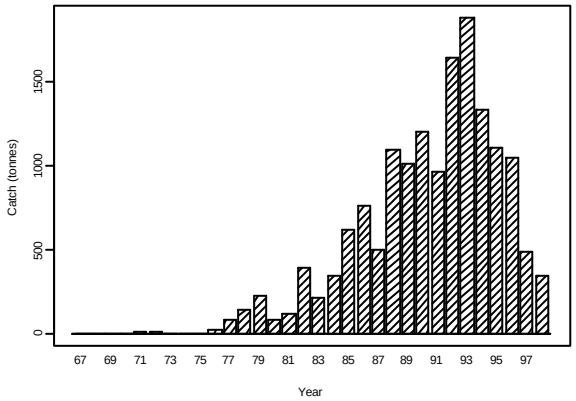
The Fishery

A foreign fishery was active coastwide between 1956 and 1984 with the largest catches landed between 1965 and 1970. Historic catch statistics of rougheye rockfish are confounded by frequent misidentification as shortraker rockfish and other red rockfish. While shortraker rockfish catches have probably always been minor in comparison with rougheye rockfish catches, Canadian trawl landings would have underestimated rougheye relative to Pacific ocean perch throughout the 1980s.

Rougheye rockfish are targeted by both trawl and hook-and-line fleets. In 1997 the hook-and-line catch amounted to 28% of the total coastwide catch of 676 tonnes. The majority of the combined catch is harvested from the southwest coast of the Queen Charlotte Islands. Other significant catches come from the southwest coast of Vancouver Island and from Goose Island and Moresby Gullies in Queen Charlotte Sound.



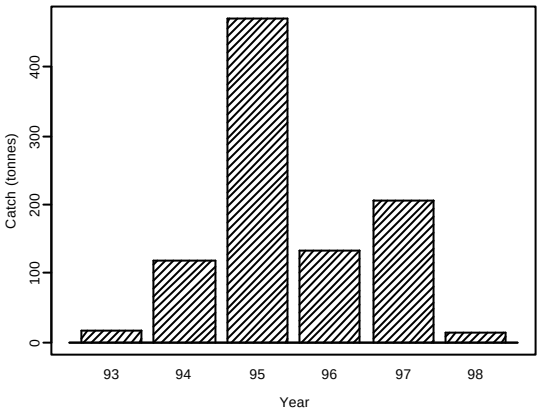
Frequency distributions in B.C. of (a) length: sample size = 13,871 (54% port landings, 46% observer), minimum = 23 cm, maximum = 87 cm, mean = 49 cm; (b) weight: sample size = 1,233 (86% port landings, 14% observer), minimum = 0.35 kg, maximum = 8.10 kg, mean = 1.67 kg; and (c) age: sample size = 1,696 (95% port landings, 5% observer), minimum = 10 years, maximum = 147 years, mean = 41 years.



Coastwide Canadian trawl catch of rougheye rockfish. Data for 1998 are not complete.

Resource Status

A biomass survey of the southwest coast of Vancouver Island in 1996 estimated rougheye rockfish biomass at 64 tonnes. However, the survey targeted Pacific ocean perch and may have underestimated rougheye abundance. The status of rougheye rockfish in Queen Charlotte Sound is uncertain. A survey off the west coast of the Queen Charlotte Islands, including the Langara Spit region north of 54° latitude, was conducted in 1997 to estimate both Pacific ocean perch and rougheye abundance. Rougheye biomass was estimated at 4,881 tonnes, but the actual biomass may be higher as the west coast of the Queen Charlotte Islands is marked by severe topography and much of the area is not accessible to trawl nets.



Coastwide Canadian hook and line catch of rougheye rockfish, 1993-98, Data for 1998 are not complete.

Outlook

Quantitative biomass forecasts are currently not conducted for this species. However, based on the longevity and assumed low productivity of rougheye rockfish, stocks should remain at low levels compared with other species, such as Pacific ocean perch.

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