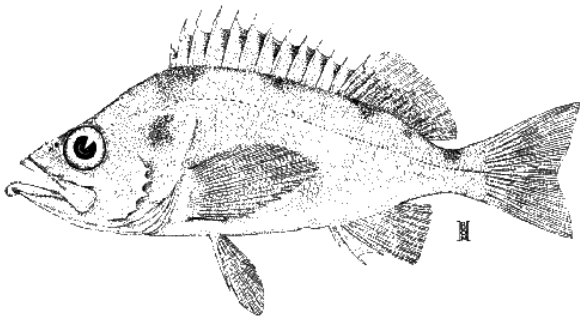
Fisheries and Oceans Pêches et Océans

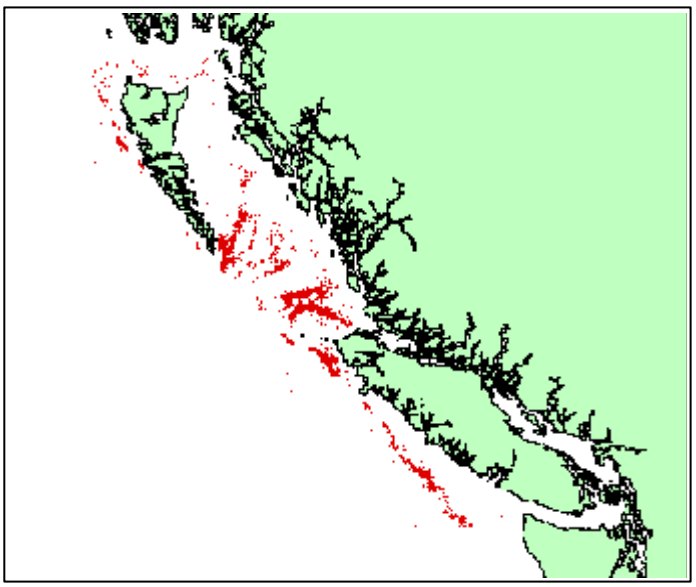
Pacific Region

DFO Science
Stock Status Report A6-17 (1999)



Sebastes reedi

Yellowmouth Rockfish
British Columbia Coast



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

Background

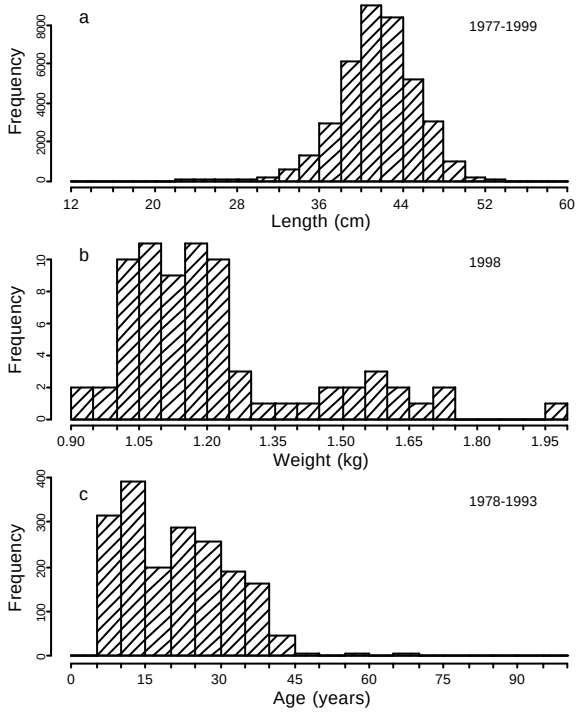
Yellowmouth rockfish (Sebastes reedi) is the second most abundant slope rockfish in terms of catch along the British Columbia coast, after Pacific ocean perch. These two species share many physical features and prior to the mid-1970s both were often classified as "red rockfish" or "ocean perch" in catch records.

This species ranges from the Gulf of Alaska to northern California and occurs at depths of 100 to 430 metres. Adults reach a maximum age of at least 70 and possibly as old as 100 years, and a maximum length of about 60 cm. Both males and females reach 50% maturity at approximately 38 cm in length. Females spawn primarily in April and May. Fertilized eggs remain within the ovary until larval extrusion and may obtain at least some of their nutrition from the female parent during development.

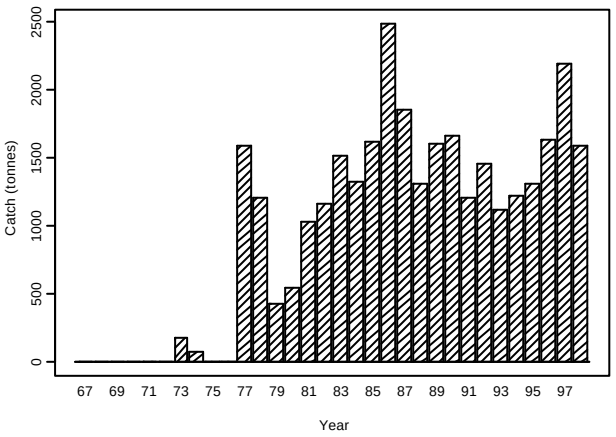
The Fishery

A trawl fishery for yellowmouth rockfish and other slope rockfish has existed in B.C. since the 1940s. A foreign fishery was active coastwide between 1956 and 1982 with the largest catches landed by Soviet and Japanese fleets between 1965 and 1970. In the early years of the Canadian trawl fishery, statistics were confounded by the practice of reporting the catch of several similar species under one category. However, reporting has improved since the late 1970s to the extent that most yellowmouth rockfish catch is now properly identified.

Yellowmouth rockfish are captured primarily by bottom and mid-water trawl gear with the largest catches taken from Goose Island and Mitchell's Gullies in Queen Charlotte Sound. Coastwide catches have increased steadily in the past several years, rising from approximately 1,200 tonnes in 1994 to 2,200 tonnes in 1997. The B.C. hook-and-line catch of yellowmouth is significant but much less than the trawl catch and has dropped from 16 tonnes in 1995 to 3 tonnes in 1997.



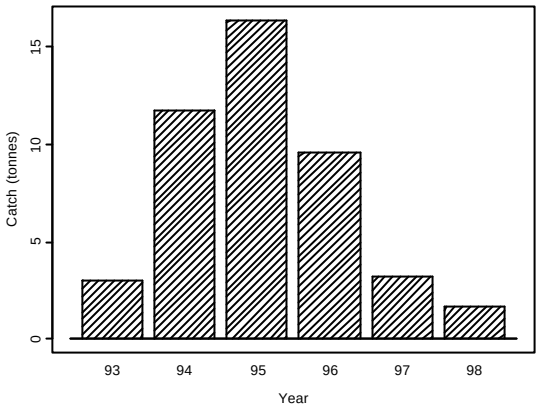
Frequency distributions in B.C. of (a) length: sample size = 38,120 (69% port landings, 28% observer, 2% other commercial, 1% research), minimum = 12 cm, maximum = 59 cm, mean = 42 cm; (b) weight: sample size = 74 (100% research), minimum = 0.92 kg, maximum = 1.96 kg, mean = 1.22 kg; and (c) age: sample size = 1,862 (83% port landings, 17% observer), minimum = 3 years, maximum = 99 years, mean = 22 years.



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

Resource Status

In the past, quotas for yellowmouth rockfish have been set relative to the Pacific ocean perch quotas, based on observed relative abundance from biomass surveys. However, these surveys have been directed at Pacific ocean perch and have employed bottom trawl gear only. Nevertheless, based on relative increases observed in these surveys and recent catch history, yellowmouth rockfish stocks may be at an average level of abundance.



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

Outlook

Limited age data gathered between 1990 and 1992 suggest that 1982 was the last year that a significant recruitment event occurred in the yellowmouth rockfish stocks in B.C. Therefore, abundance is expected to decline until the next major recruitment takes place. Such an event would likely not become evident in age data from the fishery until fish reach the age of 7.

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References

Barss, W. H. 1989. Maturity and reproductive cycle for 35 species from the family Scorpaenidae found off Oregon. Ore. Dept. Fish Wildl., Information Repts. 89-7.

Love, M. S., M. Yoklavich, L. Thorsteinson and J. Butler. A guide to the rockfishes of the northeast Pacific. In prep.

Richards, L.J. and N. Olsen. 1996. Slope rockfish stock assessment for the west coast of Canada in 1996 and recommended yields for 1997. Can. Tech. Rep. Fish. Aquat. Sci. 2134: 91p.

Schnute, J. T., N. Olsen, and R. Haigh. 1999. Slope rockfish assessment for the west coast of Canada in 1998. Can. Stock Assess. Sec. Res. Doc. 99/16, 79 p.

Westrheim, S. J. and H. Tsuyuki. 1967. *Sebastodes reedi*, a new scorpaenid fish in the Northeast Pacific Ocean. J. Fish. Res. Board Can. 24:1945-1954.

Westrheim, S. J. 1975. Reproduction, maturation, and identification of larvae of some *Sebastes* (Scorpaenidae) species in the northeast Pacific Ocean. J. Fish. Res. Board Can. 32:2399-2411.

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