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EVALUATION OF REGULATIONS CONCERNING THE FISHERY FOR CALIFORNIA HALIBUT, *PARALICHTHYS CALIFORNICUS*

by

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ABSTRACT

Evaluation of the capture of California halibut in relation to Article 13 (Sections 8495, 8496, 8497 and 8498) of the Fish and Game Code, shows that the regulation is doing its job. Nearly all undersized (less than 22 inches) juvenile halibut are escaping through the 7½ inch mesh trawl cod end and retention of other fishes seldom approach the 226.8 kg (500 lb) limit imposed by regulation.

1/ Marine Resources Administrative Report No. 77-4, February 1977.

2/ Marine Resources Region, 350 Golden Shore, Long Beach, California 90802.

INTRODUCTION

This report is in response to legislative request for evaluation of Article 13 (Sections 8495, 8496, 8497 and 8498 of the Fish and Game Code) concerning regulations within defined California halibut trawl grounds. These halibut trawl grounds are located between a line running west (true) from Pt. Arguello and a line running south (true) from Pt. Mugu in waters adjacent to the mainland shore, not more than 45.7 m (25 fm) deep but not closer than one nautical mile from land. Dimensions of the 7½-inch mesh trawl cod end length and girth required in these trawling grounds are regulated by Section 8843.

EVALUATION

Departmental sampling of California halibut in 1972, 1973 and 1976 aboard commercial trawlers fishing in the defined halibut trawling grounds shows that the 7½-inch mesh functions well in providing escapement for undersized sub-legal halibut. Retention of halibut in the 7½-inch mesh approximated that found by Schott (1975). Comparison of halibut catches in 5- and 7½-inch mesh trawl cod ends shows that 270 (95.75%) sub-legal fish weighing 326.6 kg (720 lb) were retained in the 5-inch mesh but only 12 (4.25%) weighing 16.3 kg (36 lb) in the 7½-inch mesh (Figure 1).

During two trawl experiments with large and small mesh cod ends, legal sized halibut captured by the 7½-inch mesh had a greater average length and weighed more than those taken by the smaller mesh.

In our samples from commercial trawlers in defined halibut trawl grounds, the average size of females remained about the same from 1973 to 1976. However, the number of males increased 6.2% and their average size was greater. Increased male sex products during the spawning season could provide expanded egg fertilization, resulting in an increase of

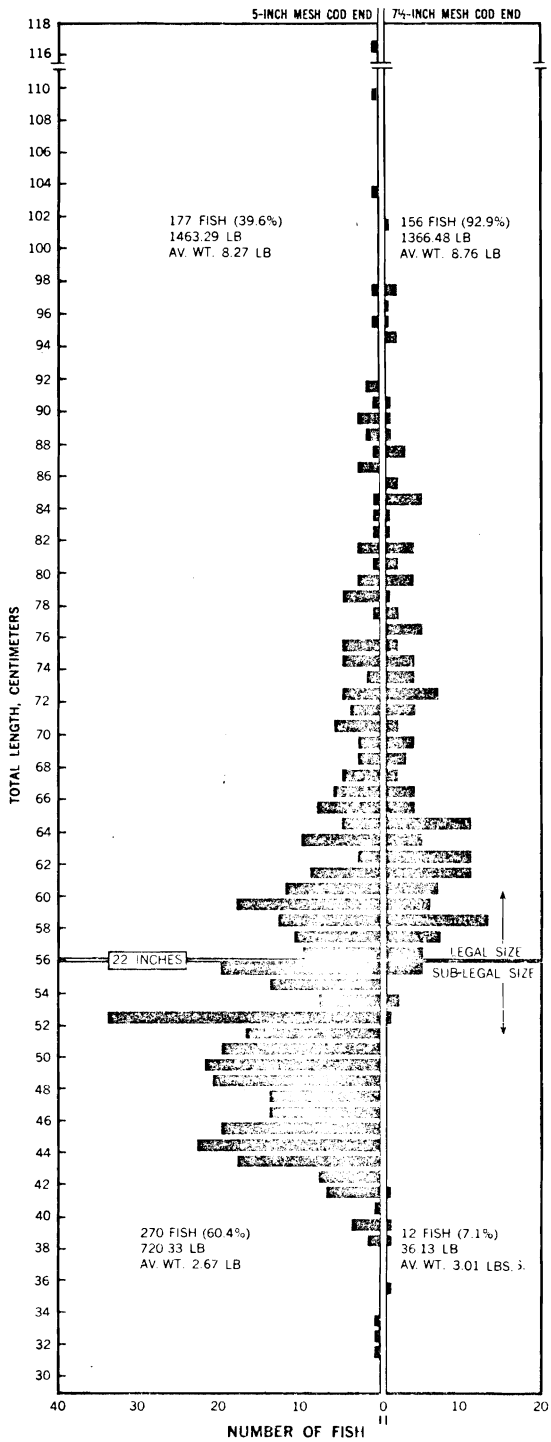

FIGURE 1, Comparison of Retention of California Halibut Captured in the 5- and 7½-Inch Mesh Cod Ends, 14 Paired Drags, 90 Min Each. Cruise 65-A-4.

the juveniles.

Typically, the capture of other species with the 7½-inch mesh did not exceed the 226.8 kg (500 lb) limit imposed by law, and the amount of fishes captured was only about 40% of that taken by the 5-inch mesh.

The closed season, March 15 through June 16, encompasses the peak of the halibut spawning season, and provides a period when some spawning may take place in the absence of fishing pressure.

CONCLUSION

The 7½-inch mesh trawl cod end required in defined California halibut trawling grounds provides escapement for undersized, unmarketable halibut. Little objection to this regulation has been shown by the commercial fleet. Most fishermen are happy that a large percentage of the undesirable and unmarketable fishes escape through the trawl cod end. Subsequently, these do not have to be sorted and discarded.

The present regulations appear to be working well and should be retained.

REFERENCES

Schott, Jack W. 1975. Otter trawl cod-end escapement experiments for California halibut. Calif. Fish Game, 61(2):82-94.