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Results of Inquiries to Other Agencies
Requesting Methods Used for Seal Control

Information Report 72-7

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Fish Commission of Oregon
Management and Research Division

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INTRODUCTION

The Columbia River seal control program has been conducted under legislative authority of ORS 506.341 which requires the FCO to pay a bounty of \$5 to \$25 for each seal killed. The program is funded under ORS 508.290 requiring payment of an annual fee of \$2.50 from each Oregon gill-net fisherman and \$50.00 from each canner. The statute also permits the commission to use funds from the seal account to control seals in the Columbia River.

The Fish Commission has paid a bounty since 1936 and hired a seal hunter during 1959-70. Effective January 17, 1970, the bounty was reduced from \$25 to \$5 by Fish Commission action. No hunter was hired in 1971 because results of a questionnaire in 1970 indicated that 53% of the fishermen would support a 1-year moratorium with no seal hunter to evaluate the effectiveness of the seal control program. A follow-up questionnaire was sent to licensed gill-net fishermen after the 1971 fishing seasons to evaluate the moratorium. Only 36% of the questionnaires sent out were returned, compared to a 41% response in 1970. Sixty-five per cent indicated that seal damage increased during the 1-year moratorium and 72% thought the Fish Commission should continue to hire a seal hunter.

The bounty program has resulted in 3,510 claims from 1936-71 with 67% occurring in the first 12 years. Only 12 bounties were claimed in 1971.

The seal hunter provided active harassment of seals during the time commercial fishing seasons were open. His activities attempted to drive seals from the Columbia River and reduce the predation by seals on salmon

in the fishermen's nets. Without a surveillance program of seal herds in the Columbia River, it was not possible for us to evaluate the effectiveness of this program.

In May 1972, we wrote to resource management and research agencies in 18 seaboard states, Canada, and Scotland to seek suggestions for effective means of harassing seals to reduce predation without actually killing the animals (Appendix). We sent 29 inquiries and received 27 replies which contained 39 specific comments and suggestions representing nine separate categories of answers. This report contains a summary of those replies.

SUMMARY OF REPLIES

1. Four replies, all from Canada, indicated that the bounty system had been tried, but was found to be ineffective and was discontinued in 1964. Allister M. Fleming, Acting Director of the Fisheries Research Board of Canada, said that bounties were not successful because interest in hunting waned as the number of seals was reduced. The only exception, apparently, is in the Maritime Region of the Canadian Fisheries Service where harbor seals are under bounty. They estimate that an average of 300-400 are killed annually under bounty claim. The grey seal is under bounty in the estuary of one river, but they have increased in numbers during the past few years so that annual controlled kills are necessary.

2. Four letters from Canada and one from Scotland said that controlled hunts by management agencies were used to attempt to control seal populations with some results. For example, in the previously mentioned Maritime Region of Canada, annual controlled kills of grey seals take between 700-800 per year. The hunt takes place after whelping and

emphasizes the pups. The Fisheries Service contracts with the commercial trade for skimmers and transportation and processing the pelts.

3. Three replies suggested that large firecrackers or seal control bombs might be effective harassing seals. California Seal Control Corporation claimed their units were successful in purse seining operations for anchovy, sardine, mackerel, and tuna but had no knowledge of how a gill-net fishery operates.

4. Four replies indicated that harassment by rifle fire was employed by fishermen when seals were in the vicinity of their fishing operations.

5. Two writers indicated that playing killer whale sounds over a powerful microphone might get temporary results. The NMFS has been experimenting with the use of killer whale sounds to frighten porpoises away from purse seine nets.

6. One reply suggested baiting fish with cyanide.

7. The reply from the Maritime Region of the Canadian Fisheries Service also indicated that some research through tagging and branding is being carried out to ascertain whether harassment will move seals from an area. No results were given.

8. Twelve replies said they have either no seals or no seal problem.

9. Seven replies referred us to another party.

In conclusion, the results of our inquiries for alternative methods of harassing harbor seals were not encouraging. Although methods do exist for preventing seal damage to stationary purse seine fisheries, these do not appear to be applicable to Columbia River drift gill-net fishing operations. Replies from Canada and Scotland indicated that controlled kills of breeding populations were presently the only effective methods of seal control being employed besides harassment by individual

fishermen. However, the recent Federal Marine Mammal legislation which becomes effective December 21, 1972, will eliminate this and many other alternatives. This Act means that bounties will no longer be paid and that fishermen can no longer harm or kill seals in the Columbia River or on the high seas. Any proposed methods of seal control or harassment will probably have to be approved by the Federal Marine Mammal Commission.

APPENDIX

May 31, 1972

Gentlemen:

I am seeking information on possible methods of harassing seals that could be used in the Columbia River. I am contacting other coastal states which may have problems with seals.

Briefly, here is the problem. We have a gill-net fishery that operates in the lower Columbia River to harvest salmon. There is also a harbor seal population in the lower river. During open commercial seasons the seals damage and in some cases completely destroy salmon held captive in the fishermen's nets.

The Fish Commission has legislative authority to conduct a seal control program in the Columbia River. In the past, seal control has been attempted by paying a bounty and hiring a seal hunter. There has been much controversy about these programs and no available information whether or not they are effective.

We are seeking an effective means of harassing seals to reduce predation without actually killing the animals. If your agency has ever encountered a similar situation, we would be interested in knowing how you solved the problem or if you know of anyone who has.

Thank you for whatever assistance you can provide.

Sincerely,

Burnell R. Bohn, Program Leader
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Attachment: Distribution List

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