

Special Report No. 6

As a result of numerous complaints it has been felt necessary to justify the present Commission regulations on the time of closed season for the digging of Horse clams in the Coos Bay area. This report summarizes the basis of the regulations.

In brief, the following are the points considered at the public hearing July 22, 1948 at which the regulations were propounded:

1. Data presented showed horse clams to be in very poor condition following their spawning period. If permitted to recover before being dug, the same clams will produce over 80% additional pounds of food.
2. Data presented showed the horse clams to be declining in abundance in all areas involved.
3. Since there is so much wastage of potential food by digging during and following the spawning period, supplemented by the fact that the stocks are declining in abundance, a closed season during spawning period was decided upon without any opposition whatsoever.

However, various differing opinions were expressed as to the correct time for this closure. At the present all opposition or complaints that have been noted still center about this last point. Therefore, this report will consider the desirability of a closed season, a proven and agreed upon matter, the only question being proper time for such.

Periodic checks on the clams in Yaquina Bay during 1947 and 1948 showed beyond any reasonable doubt that the horse clams started spawning in early February for that year, and that by March 22, all but 4% were spawning, with 77% listed as totally spawned. Although exact percentage counts are not available for other bays, observations have shown spawning to occur at the

same approximate time, i.e., very early spring. The State of Washington Department of Fisheries has also found (unpublished data) that the horse clam spawns during February and March in their waters.

As was also pointed out by several individuals at the public hearing, the time of spawning may vary somewhat from bay to bay but it also varies within each bay depending upon area, and from year to year. Although no adequate figures are available upon any of these variations it is a foregone conclusion that they do exist, but there is no evidence to indicate excessive time discrepancies. For example, the earliest time reported at the hearing was during January (in Tillamook Bay).

Since a general season for the entire state was desired in line with much needed simplification of the older set of laws, the closing date of January 1 was recommended. This was despite the fact that the Commission has no data to indicate general spawning that early. However, it was suggested with the idea of guaranteeing covering the before mentioned variations between different years, and between different areas within a bay. Such a procedure was felt justified in this case where concrete data also showed a decline in stocks which could be partially offset by a reduction in fishing intensity by time limitations. The same policy was followed in regard to the opening date of July 1, at which time the usable meat yield was found to be halfway between the two extremes (Yaquina Bay).

Exact data for the case in question, Cooe Bay, is woefully short. Only two sets of exact yield figures are available; May 25, 1948 when recovery of usable meat over total meat figured 52.7%; and July 9, 1948 (from a different area) when the comparable figure was 48.6%. These figures appear somewhat lower than Yaquina Bay for comparable times but it is not known whether this is due to slightly later spawning, somewhat slower recovery

from spawning, or merely a natural lower yield figure for Coos Bay. It will not be possible to answer this until the extremes for Coos Bay are determined.

It was noted at the time that the clams listed above had spawned at an undeterminable earlier date. A brief examination of over 50 clams on January 14, 1949 showed the majority to be not yet spawned, with only 1 clam specifically noted as being in thin, poor condition, indicating spawning. An attempt to obtain more pertinent data on March 10, 1949 was unsuccessful due to a heavy surf outside holding the tide up at least two feet over its predicted value and preventing reaching the main beds. Only one small clam (length 94 mm) was obtained by digging in the water. This clam, however, was partially spawned. In view of the number of complaints that have been received the matter will be checked again at the next opportunity.

However, what little data is available does not show any striking deviation in the spawning time of the horse clam in Coos Bay against that found in the Yaquina. It is firmly believed by the writers that a complete investigation will show the overall beds to correspond quite closely to the other bays in this matter.

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March 11, 1949