

*This report sent to  
C. Waelke, Nov. 7, 1952*

## Special Report

Shellfish

Laboratory

### Results of the 1947 Experimental Plantings of Kumamoto Oyster Seed

The ten cases of experimental Kumamoto seed received in 1947 through the Washington State Department of Fisheries were divided among Coos Bay, Umpqua River, Yaquina Bay and Tillamook Bay. All plantings were made within a few days of April 28, 1947.

This report deals specifically with the observations made on growth in relation to the areas in which the seed was planted and does not deal with industrial problems concerning harvesting, processing, etc..

The Coos Bay plantings were made in Joe Ney Slough, a small slough on the lower part of Coos Bay. The seed was planted in an area on which were existing regular Pacific oysters. This, it is believed, was a fair test area. The seed when planted averaged 13.0, 15.5 and 15.2 spat per shell for the three cases planted. On February 11, 1949 a check on the number of spat that survived showed the clusters to be averaging 14.5 oysters. These oysters measured 46.6 millimeters in length and yielded a computed volume of 0.95 gallons per 1,000 oysters. A condition factor of 48.8% existed by use of the formula  $\frac{\text{Total vol. minus shell vol.}}{\text{Vol. of meats}} = \text{c.f.}$  No further check was made regarding these. The conclusion reached was that the Kumamoto seed would grow and did grow satisfactorily in this test area.

The Umpqua River Plantings were planted near Winchester Bay but the description of the area of planting was such that several trips to the area in an attempt to find the oysters failed. The possibility of poaching should not be overlooked as no one was detailed to watch over the oysters. Nothing definite could be concluded.

ed from this planting.

The Yaquina Bay plantings were made near the town of Yaquina in a lagoon. About the 1st of August, 1947 these oysters averaged 34.7 millimeters in length and 20.6 millimeters in width. It was obvious at this time the area was too soft for the successful raising of Kumamoto oysters as a heavy mortality was noticed. Efforts to locate this planting at later dates failed, undoubtedly due to the fact that all of them had silted and buried down. For a slower growing oyster such as the Kumamoto it should be kept in mind that a soft ground is not advisable for planting, especially under the conditions found in the Yaquina Bay lagoon.

Deep water planting of Kumamoto seed has proven possible in Yaquina Bay above the town of Yaquina. Several hundred cases have been planted by private growers in this type of habitat since 1949 resulting in fast growth -- two to two and one half years to marketable size. Expansion of this type of growing is limited, however, due to condemnation of this area by the Oregon State Board of Health because of human pollution in the area. Nearly all of the towns in Oregon dumping raw sewage into river systems have under construction sewage disposal plants. With the completion of these plants many more acres of shellfish growing areas should be opened to oystering.

Tillamook Bay plantings of Kumamoto seed were made in the vicinity of Boulder Point on two different heights of flats, one high and one low. The first part of August, 1947 the oysters on the high ground averaged 29.1 millimeters in length and 20.7 millimeters in width; those on the low ground averaged 33.6 millimeters in length and 21.1 millimeters in width. No other samples of these

oysters are recorded as being taken. A recent conversation, October 23, 1952, with the oysterman on whose tideland the oysters were planted revealed that the plantings did "very well" both in growth and in fattening. In fact, encouraged by these plantings he ordered and planted 22 cases of Kumamoto seed in 1948 and 25 cases of seed in 1950. Due to condemnation of his ground by the Oregon State Board of Health because of human pollution no further attempts at rearing these oysters have been attempted by him. As in the case of Yaquina Bay more area should be opened to growing ~~when~~ when the local sewage disposal plants are completed. It appears then that the Kumamoto oyster may have a future in Tillamook Bay at least as far as the conditions necessary for growth and fattening are concerned.

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