
Studies on the Effect of Dredging Operations upon Fish and Shellfish*

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ABSTRACT

Investigations were made to determine the effects of dredging operations upon fish and shellfish in the vicinity of Great Point Clear, Alabama. Damage to scalefish and motile crustacea was not observed, even within 25-50 yards of an active dredge. Shellfish were not found to suffer damage when suspended from dredge itself. Damage due to larger particles of mud occurred on bottom in immediate neighborhood of dredge, but did not extend beyond 400 yards. In most cases this distance was much less, in some cases being about 75 yards.

Because momentary conditions of tide, speed of current, speed of dredging vary, and variations exist in various bay bottoms, every situation merits separate consideration. *Controlled dredging* is suggested as the best solution. By this method the dredging activity is coordinated with local conditions, spatial and temporal. In the areas under consideration (West Florida and Alabama), controlled dredging should begin to operate at 400 yards distance from live oyster reefs.

The results of this study, carried out in deeper water, parallel those obtained by Lunz in his excellent studies in the St. John's River, Florida, and the Santec River area of South Carolina. The present study and those of Lunz underline the fact that damage to fishery animals due to dredging is frequently overrated.

There is some evidence that dredging stirs up organic detritus resulting in a beneficial effect to shellfish and crustaceans.

*Published as Technical Series No. 5, Florida State Board of Conservation.