Progress on Projects, December 1953

FREEZING FISH AT SEA--NEW ENGLAND: Specifications are being drawn up covering repairs to the Service's research trawler Delaware recently damaged by fire.

(Boston)

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DEVELOPMENT OF A DRIED PRODUCT FROM CONDENSED MENHADEN SOLUBLES OR STICKWATER: Samples of dried menhaden solubles were prepared by a commercial concern using a solvent-extraction method. The product will be compared with the laboratory drum-dried samples of the same lots to determine whether or not the process has a beneficial effect on hygroscopicity and on storage characteristics. Comparison will also be made of the nutritive value by animal-feeding tests and by analyses for the various vitamins.

(College Park)

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COMPOSITION OF FISH: The proximate composition of one sample of the white muscle tissue from octopus tentacles was determined. The results are as follows:

Moisture - 84.0 percent	Oil - 0.8 percent
Protein - 14.0 percent	Ash - 1.9 percent

(Ketchikan)

COD-LIVER OIL AND PRODUCTION COSTS

Nutrition studies at the U. S. Fish and Wildlife Service Experimental Hatchery, Cortland, New York, have included studies on the desirability of providing cod-liver oil in the diet of trout. The Service has recently summarized the relation of cod-liver oil to production costs.

The inclusion of cod-liver oil at the established level of 3 percent of the diet has increased the rate of growth from 20 to 30 percent. The cost of the oil at this level is approximately 1 cent per pound of food. Assuming a total cost of 7 cents per pound for the standard diet and a conversion factor of 3 (pounds of food to produce 1 pound of fish), it would cost 21 cents to produce a pound of fish. If a 20-percent increase may be expected from the use of oil, the same amount of food will produce fish at a conversion rate of 2.5 pounds per pound of fish. The cost of this diet would be 8 cents, giving a total cost of production (food) of 20 cents per pound. Aside from this saving, it would take only four-fifths as long to rear the fish to a given size and result in a great decrease in labor and handling costs.

The total cost, of course, would depend upon the hatchery, its location, and efficiency of management.

--The Progressive Fish-Culturist, April 1953