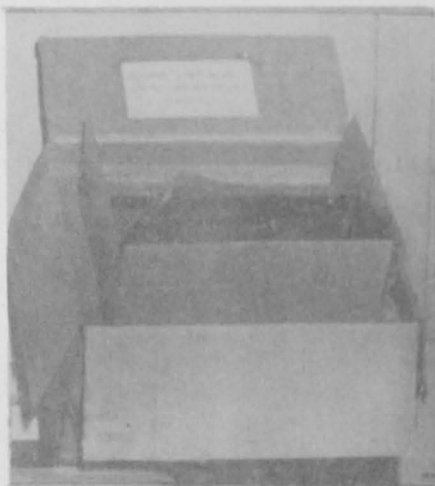




MAY 1948

College Park, Md.

An experimental shipment of two 10-pound cartons of frozen fillets packed with dry ice in an insulated corrugated paperboard shipping container was made from College Park to New Orleans by railway express. A return shipment was also received. The fillets arrived in excellent condition in both instances.



INSULATED LIGHT-WEIGHT SHIPPING  
CONTAINER FOR AIR TRANSPORT

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The vitamin D (AOAC assay) content of a sample of Bering Sea cod liver oil was found to be about 200 U.S.P. units per gram.

\* \* \*

A large quantity of fish salad was prepared, packaged and frozen, for storage tests. The salad dressings used had been specially formulated to be incorporated in frozen salads.

\* \* \*

Palatability tests were conducted using recipes for New England and Manhattan clam chowder, shad, shad roe, scallops, oysters, frozen lobster tails, pollock salad, salmon salad, fish cakes, and seafood cocktail sauces with shrimp. Also, ten lots of canned fish sandwich spreads were tested.

### Beaufort, N. C.

An increase in the U. S. Coast and Geodetic Survey appropriation for the next fiscal year will enable a more extensive survey, proposed cooperatively with the U. S. Fish and Wildlife Service, to be made of submerged obstructions and wrecks off the Virginia and North Carolina coasts. Serious losses to fishing gear through contact with these obstructions have been reported.

### Boston, Mass.

The observer and consultant detailed to the Deep Sea in Alaskan waters returned to Boston with a report that an improvement was made in the construction

of the cod end of the trawl during the trip. The new cod end, made up in two halves, with a stretched mesh size of 10 inches, is constructed of rope and hog rings and differs in construction from the conventional type in that the ropes are laid cross-diagonally instead of vertically, and the stresses of weight are upon the bars which cross from the point of tension to the side lacings with no apparent undue stress on the hog ring fastenings. The belly section was also redesigned to make the net more adaptable for king crab fishing.

\* \* \*

Eighty samples of water and clams from 16 sampling stations on the Phippsburg and Georgetown sides of the Kennebec River were examined bacteriologically. Clam samples as well as water samples, collected at high and low tides, were obtained from the Parker River and Ipswich areas to ascertain the extent of pollution.

\* \* \*

The Quartermaster Food and Container Institute, Chicago, Ill., has reported that the meat products smoked in the electrostatic fish smoking device at Eastport, Me., absorbed a fair smoked flavor, although the desired smoked appearance usual in products of this type was absent.

### Ketchikan, Alaska

The study of methods to produce commercial and vitamin oils from salmon waste has been completed and a preliminary report written. Results indicate that the recovery of oil and its vitamin content are not greatly affected by pre-grinding the material or by the processing temperature. Too little or too much alkali used during the processing results in poor recovery of oil. Effective oil recovery from whole salmon cannery trimmings resulted from the use of  $1\frac{1}{2}$  parts of sodium hydroxide per 100 parts of waste. With some exceptions, the samples of oil tested between 800 and 1,370 units of vitamin A per gram.

\* \* \*

Feeding tests with frozen and processed ground salmon cannery trimmings at an experimental mink farm indicate that both are quite satisfactory as compared with standard mink diets. There was no significant difference in the number of kits born per female on the various diets.

### Seattle, Wash.

After 34 weeks of storage at 0° F., refrozen fillets which had been prepared from frozen whole fish after 11 weeks preliminary storage were rated edible and of fair quality.

\* \* \*

After 22 weeks of storage at 0° F., brown rockfish fillets were inedible because of a strong rancid flavor in the fat layer. Red rockfish fillets frozen for the same period were slightly rancid but were rated entirely edible. Fillets from both species of rockfish in which the fat layer had been removed by a skinning

machine before packaging and freezing were superior in appearance and flavor to the regular fillets.

\* \* \*

The Service observer and consultant aboard the experimental purse seiner Alaska, while waiting in Honolulu for damage to the vessel to be repaired, is studying the methods used by the several types of fishing craft operating in the local Hawaiian fishery.

\* \* \*

The Pacific Explorer's Service observer and consultant reports from the Bering Sea that results of the initial king crab fishing in Pavalof Bay area indicate a stock of sufficient volume should exist for exploration by several small fishing vessels. King crabs in the Bering Sea were found to be widely distributed at 40 fathoms and less along the north side of the Alaska Peninsula but the greatest concentration of fish were found at depths of 40 fathoms and over. Since the majority of the crabs do not have a well developed red membrane surrounding the leg meat at this season, the meat tends to break up unduly during the shaking process to detract somewhat from the appearance of the pack. However, the amount of meat in the crabs is increasing and the strength of the membrane is expected to improve. The moulting season of the female crabs and the consequent mating season is later this year than in 1941 which might be attributable to the later vanishing of the ice pack.

\* \* \*

Continuing the study on Pribilof fur seal livers for both oil content and vitamin A concentration in the oil, analyses of 200 individual seal livers, mostly three-year-old bachelors, taken during the regular killing season, show the average oil content to be about 3 percent. One liver had an exceptionally high oil content of 14 percent. The vitamin A concentration was greatly variable, ranging from a low of 1,000 to a high of 200,000 spectrophotometric units of vitamin A per gram of oil, with an exception in one liver being noted, assaying at nearly 600,000 units.



### CRAB MEAT SALAD

To 3 cups of cooked crab meat, add  $\frac{1}{2}$  cup of salad oil and an equal quantity of vinegar seasoned with onion, tabasco sauce, and salt. Let the crab meat stand in this seasoned dressing for several hours, then drain and combine it with 2 cups of cut celery and with enough thick salad dressing to coat all the pieces. Pile the salad on crisp lettuce and serve. Lobster or fish flakes may be used in these same proportions.

--Fishery Leaflet 106.