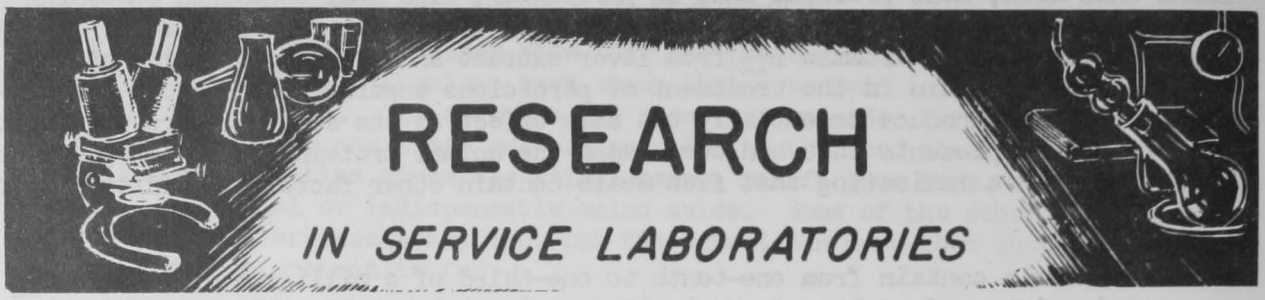

November 1950

REFRIGERATION: For an evaluation of the keeping quality of Alaska shrimp--(1) raw, (2) cooked, and (3) treated with ascorbic acid--sample frozen packs were prepared aboard the Service's exploratory fishery vessel John N. Cobb during its shrimp exploratory work in Tenakee Inlet during November. (Ketchikan)

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Comparative tests were made on the various species of Pacific Coast rockfish held in cold storage with the following over-all results: Sebastes marinus (Atlantic coast rosefish) had the best salability, with no significant decrease due to storage changes. The Pacific coast Sebastodes alutus (long-jawed rockfish) was very slightly inferior to the S. marinus species but with practically no decreasing quality due to discoloration or to storage changes. S. ruberrimus,(red snapper), S. paucispinis (bocaccio), and "idiot" rockfish (scientific name unknown) were all slightly inferior to the S. alutus with some indication of rancidity and discoloration being present. In the next classification came S. diploproa (lobe-jawed rockfish) and "chilipepper" (S. goodei?) which showed slight but definite indications of rancidity and discoloration. S. pinniger (orange rockfish) and S. miniatus (vermilion rockfish) were definitely rancid and had become considerably discolored due to oxidative storage changes.

S. pinniger is one of the common species marketed as rockfish by the Pacific Coast fillet industry. In the initial tests there was not a great deal of difference between this species and the S. alutus samples examined. In the test described above, however, there was an enormous difference between these species due to development of very adverse storage changes by the S. pinniger rockfish. It would appear from the results of this test that the factor of storage alone would make S. alutus far superior to other common species of rockfish now being marketed in the Pacific Northwest. (Seattle)

* * *

BYPRODUCTS: About 170 samples of fish meal, stickwater, and other intermediate products during the processing of fish meal were recently collected in California. In three different fish meal plants, extensive samples were obtained of the product at different stages of manufacture. Also, numerous samples were obtained in a large number of other plants using various types of drying and processing equipment. Although samples of several meals from various species (including anchovy, mackerel, tuna, and sardine) were obtained, most of the samples collected were produced from sardines (pilchards). One series of sardine meal samples were obtained from a large testing laboratory. These samples had been core sampled to be representative of large shipments of sardine meal so that each sample obtained was a composite sample

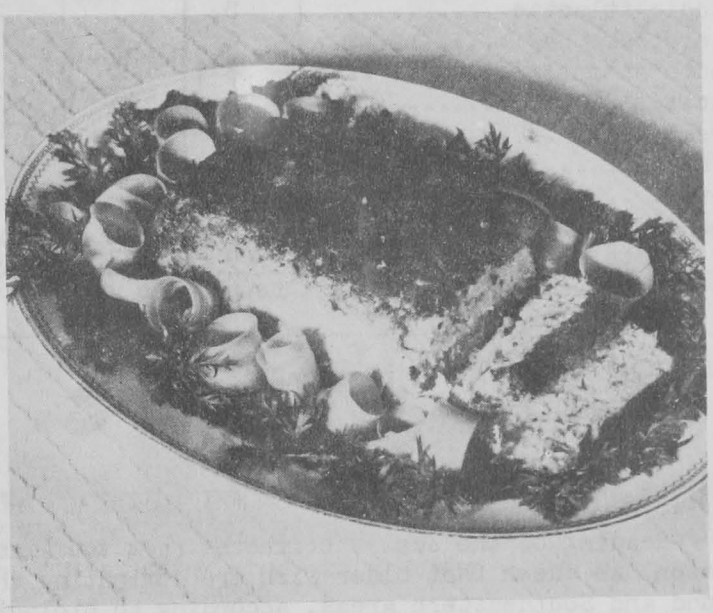
obtained from at least 100 bags of fish meal and was supposed to be representative of a 500-bag shipment. These included samples prepared from the start of the sardine season to the present time.

All of these samples (including the meal samples) were frozen and are now in cold storage at the Seattle laboratory. It is planned to analyze these samples for riboflavin and vitamin B_{12}, but active work on this project will not get underway until some time after January 1 when the hatchery food sample analyses have all been completed. (Seattle)

* * *

CANNING: The three different lots of tuna (namely, troll-caught frozen tuna, gill net-caught frozen tuna, and gill net-caught, iced and frozen tuna) were canned at a commercial cannery in Astoria using commercial type equipment. The condition of the fish was carefully noted at the time of canning. No difference could be observed in the condition of the raw fish. After precooking, there was no difference between the gill-net- and troll-caught fish, which had been frozen immediately upon catching. Most of the iced gill net-caught fish, likewise, were of equivalent quality to the other samples, but a few showed a very slight indication of honeycombing. A few cans of the canned product from each lot were cut and a preliminary examination made, but no difference in quality could be observed among any of the three lots. The canned fish are now being held for a period of several months before extensive examinations are made by a number of different laboratories. (Seattle)

FISH LOAF



4 cups canned flaked fish
3 cups soft bread crumbs
3/4 cups milk
2 eggs, well beaten
1½ tablespoons minced parsley
1 tablespoon lemon juice
1½ teaspoons salt
3 tablespoons butter or fortified margarine
2 tablespoons onion, grated
½ teaspoon celery salt
Few grains of cayenne

Combine all ingredients, mixing well. Place in a greased loaf pan. Bake in a moderate oven 350° F. for 40 to 45 minutes or until loaf is firm in the center. Unmold on a hot platter, and serve with a rich, bright-colored sauce. Serves 6.