

vote time to the necessary research and, considering the talent and imagination with which it is endowed, there is little doubt that it will help pioneer in this last great frontier.

Finally some remarks should be made about today's products. Competition from synthetics is very real and tends to lower the relative market prices of oil, meal and solubles. It is, therefore, highly important that this industry continue to increase its degree of quality control so its products will be less vulnerable to substitutes.

In the two years the writer has worked as a representative of the menhaden industry, few complaints have been received concerning its products or services. However, there is one characteristic of the industry that does not please the average customer. This is that most of the meal, scrap and solubles must be sold almost as soon as they are produced. Unfortunately, the season of the highest production does not correspond with the season of highest consumption and, as a result, most of the tonnage is sold in a buyer's market during which most producers are distress sellers. It is not known what this costs the industry, but it would not be surprising to learn that its mounted to as much as \$10 per ton on meal and scrap and one half to one per cent per pound on solubles. No solution is apparent now, but when it is found it will pay dividends in higher average sales income, greater customer satisfaction and a reduced vulnerability to competition.

"Quality Control" in the Fisheries

KARL ENVOLDSEN

President, Envoldsen Shrimp, Inc., Cleveland, Ohio.

Quality has come a long way in the last 50 years. Fifty years ago fish canning was a rather crude operation. Cans were hand-made and hand-sealed and there was only a small pack as a consequence. Sale of even this small pack was difficult, partly because of low quality. Cans of tuna would sometimes explode on the grocer's shelf and spray the ceiling and shelves with spoiled fish, resulting in a very angry grocerman. Tuna canning was unsuccessful for a long time, until through experimentation and general cleaning up of plants it became a profitable industry. Cannerymen began to learn about sanitation and its effects upon the keeping quality of foods.

By now the Food and Drug Administration had come into being. Public confidence in the Administration was bolstered by backing given it by the "Good Housekeeping," which had become a household by-word for guidance in quality in foods.

Then, as now, the public knew that "Food and Drug" was taking care of food quality.

All of this leads to the conclusion that enforced quality control is what brought quality along so fast during the past half century. But the prohibition amendment of the twenties, taught that the Federal Government was not so infallible as had been supposed. Doubts were created as to the necessity of quality control.

A "What is good enough for Father, is good enough for me," attitude was prevalent. Laziness also has a deal to do with poor quality, and some of the

failure to progress as far as we should have in quality control can be attributed to this.

In 1928 the writer heard of a stupendous purchase made by O. L. Carr of Mid Central Fish Company in Kansas City. He had bought a whole carload of "Nordic" fillets of frozen haddock. It was amazing to think that anyone would buy a whole carload in the central part of the United States, especially in Kansas. But it sold, as did subsequent car-loads, and today the big distributors in the central part of the United States buy millions of pounds of frozen fish. They only buy them because the quality of the fish is so much better than it was under the old "iced-fresh" conditions. Despite this improvement, however, much of the fish in the country is not frozen soon enough after coming out of the water. The public gradually is learning this and is demanding good quality. Public opinion may be the main element in forcing quality control. Is the fish industry going to pick up the challenge and go forward from here faster than it has in the past? Because of the things we know today about quality (thanks to the research being done by the various universities and by government and commercial laboratories and companies throughout the world) the time is right. The pressure of consumers make it certain that an enforced quality control will be imposed upon the fish industry unless the industry controls itself.

Recently Dr. John Ward from England, visited our plant. He said, "Mr. Envoldsen, this is the finest plant I have ever been in, but I want to tell you that I am not very pleased with the majority of the fish plants and other food canning plants I have seen in your country. In England, food plants must have nothing in them but stainless steel. We really go in for some quality over there. We have made great advances in recent years, but the greatest improvements came after we were forced to make them."

The writer is chairman of the Quality Committee for the National Fisheries Institute. The idea of control has been rejected and the group is called the "Quality Committee".

The committee functions at present by exposing to the packers themselves and to their competitors the faults of the industry, through cuttings and analyses, and then to let them go home to clean up their own plants.

In the writer's opinion the Shrimp Association of the Americas may be putting the cart before the horse. While they are suggesting to their members improvements in sanitation in their plants, they are also spending a great deal of effort on advertising. To advertise something that isn't the best of quality is rather a waste of effort. Sales will probably show improvement for a while, because when the people do not know what a quality should be, they accept anything. After a while they begin to find out that some qualities are better than others, and then the packers of poor quality products will get hurt. In regard to the quality control work of the Shrimp Association of the Americas has had its greatest effects in plants in Mexico.

Voluntary government inspection that was proposed several years ago by Food & Drug has pretty much failed, because it was not set up by the industry, but by people who do not understand the meaning of practical quality controls in the shrimp industry. In our own plant, which we think is the finest fish plant in the world, we put out shrimp, on which the bacterial count on the finished product average less than 100 bacteria per gram. Yet that plant would not pass the rules set up in the voluntary inspection!

One factor which prevents the production of better quality fish or shrimp products is resistance from the fisherman and his union. It is almost impossible for any fish dealer to tell his fishermen to dump a load of fish that hasn't been properly handled. That could only be done with a strong organization and rigid quality control. It must be preceded by a great deal of research on the proper handling of fish and shrimp.

The work done by Mr. Punchochar and others of the Fish & Wildlife Service in the freezing of cod and haddock in the round at sea, has been very useful. The freezing of shrimp at sea has also shown how a high quality product can be handled. However, these advances are bound to come slowly and until the public has learned to differentiate between qualities and to pay more for fine quality, they will continue to be slow.

In the past half century there have been remarkable advancements in food quality and plant sanitation. But while the public still believes all foods to be adequately policed by the Food & Drug Administration advances cannot be made as fast as they should. Research and institutions are giving us much valuable information that many of the food processors should use. By far the largest part of our food comes from fine, clean plants and materials, but much improvement is possible. The fish industry will be forced to establish standards of quality and quality control and, that by far the best way to have these will be through voluntary controls *within the industry itself*.

The Economic Effect of the Importation of Fishery Products on American Standards

A. J. WEGMANN

President, Bagille's Seafood, Co., Inc., New Orleans, La.

The importation of seafoods, and particularly of shrimp, has been a controversial subject since the closing days of the last war. Many ideas have been advanced and many arguments have ensued, but none have solved the problem. Greater imports of shrimp, year after year, have aggravated the issue. Mexico has been the chief exporter of shrimp to the United States, but other foreign countries, particularly those of South America, are now entering the picture. India will no doubt also enter into the picture in the near future. Some solution must be sought for this situation. Any problem on controversial subject can be satisfactorily solved, if the will to do so exists.

Until recent years almost 100 per cent of the shrimp handled and sold commercially, came from these Gulf of Mexico waters. Let us recall the geography of the Gulf of Mexico, since it is from this body of water that about 90 per cent of the present supply of commercial shrimp is taken. In the U.S.A. the State of Texas on the western side; on the east is Florida. Between these lie Louisiana, Mississippi and Alabama. At the present time, Texas and Florida are the two largest producing states from grounds of the Mexican coast. Texas and Florida boats also do considerable fishing of shrimp off their own shores and Alabama, Mississippi and Louisiana boats do practically all of their fishing off their own shores. Much of it is in "inland" waters. Louisiana is the principal producer of domestic shrimp in the United States.

The development of the shrimp industry—boats, trawls, and other equipment