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# FIVE YEARS OF VOLUNTARY FISHERY PRODUCTS INSPECTION

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#### ABSTRACT

This article gives a comprehensive view of the U.S. Department of the Interior Fishery Products Inspection and Certification Service.

## INTRODUCTION

The fishery products inspection and certification service of the U.S. Department of the Interior ended 5 years of operations on June 30, 1963. The actual inspections are now generally made by the Department's Bureau of Commercial Fisheries inspectors. The purpose of this article is to give the fishery industries an accounting.

The following are discussed: (1) need for inspection; (2) legal basis; (3) current status; (4) benefits; (5) cost; and (6) future prospects.

## NEED FOR INSPECTION

When the housewife goes to the market to buy fresh whole fish, she can roughly gauge the quality of the fish before she buys. If, for example, the eyes are sunken, that is an indication that the fish are not strictly fresh. When she shops for packaged fish, however, as has become increasingly the custom, she is less able to ascertain the quality until after she has bought the fish and has opened the package.

If at that time, she finds the quality unacceptable, her usual reaction is to stop buying that product. When a group of consumers stop buying, this boycott touches off a chain reaction that travels back through the channels of trade to the producer. The industry then is faced with a thorny problem, which centers around the difficulty of the buyer and seller-perhaps separated by the distance of a thousand miles or more--to achieve a meeting of the minds on the questions of quality and of a fair price based on the agreed quality.

Frozen fried fish sticks illustrated this problem. When fish sticks were first introduced to the consumer in 1953, this product met with immediate success, and sales boomed. As marginal processors entered the business, they cut corners, quality dropped, and the consumer found he could no longer rely on the quality or the uniformity of the product from package to package. The resulting buyers' resistance put some of the fish stick manufacturers out of business.

Three things are needed to resolve this producer-to-consumer marketing problem:

1. There must be some type of nationally recognized system for classifying the quality of the product.

2. The actual classification of the product must be the responsibility of an unbiased party.

3. The consumer needs some means (a) of identifying the products that are thus classified and (b) of ascertaining their relative standing with respect to the classification system.

### LEGAL BASIS OF INSPECTION

The producer-to-consumer marketing problem is not unique to the fishing industry. Agriculture, for example, has worked on a solution for many years. As a result of its ex-\*Chief, Fishery Products Inspection and Certification Service, Branch of Technology, U.S. Bureau of Commercial Fisheries, Washington 25, D.C.

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sumer. To meet this need, we have made the standards more exact and have placed more emphasis on better plant sanitation.

We believe that a program geared both to the needs of the industry and the desires and expectations of the consumer will achieve our goal of increased production and consumption of fishery products of high quality, the achievement of which will benefit both our citizens and our fishing industry.

<u>CHANGES</u>: We have made other changes in the inspection program largely as a result of the recommendations made during the Industry-Government Inspection Conference held in Washington, D. C., in June 1961. Suggestions that were made by the industry and that have been implemented include the following: (1) inspection certificates have been redesigned to differentiate clearly between continuous inspection and lot inspection; (2) the inspection regulations have been amended, streamlining recovery of costs for services rendered and achieving greater uniformity in the assessment of fees and in the methods of charging; (3) a formal communication system has been established whereby all proposed inspection policies are made available to the processors for their consideration and comment prior to adoption; (4) regulations have been established with regard to stripping labels bearing Federal shields from mislabeled products.

PROBLEMS: The Standards and Inspection Program is not without its problems. Consumers' Union, for example, has been critical of the over-all quality of fish sticks, breaded shrimp, and frozen fish fillets. The Bureau is in the process of tightening those standards to assure that better products reach the market. Another problem is the loss of quality during distribution. Work is under way to find how time and temperature fluctuations affect the quality of the products as they move through the distribution channels. Another problem is to maintain uniformity in the application of standards by USDI inspectors. The Bureau is using several approaches to overcome this difficulty.

TYPES OF SERVICES AVAILABLE: At present, three major types of inspection services are provided by the Bureau.

1. Continuous Inspection: The continuous inspection service provides that an inspector shall be stationed at the plant during all shifts of the processing operation.

2. Lot Inspection: The lot inspection service provides that a specific lot of product designated by the applicant will be officially sampled, examined, graded, and the results certified

3. <u>Cross-Use of Other Federal Inspection Service</u>: Federal inspection service is provided in conjunction with the Department of Agriculture to processors of both agricultural and fishery products.

Many food processors have taken advantage of technological advances and are producing a wide variety of products from agricultural and fishery sources. In a plant equipped to produce TV dinners, for example, the processor needs only to change the raw material input to produce packaged beef, poultry, or fish dinners. To make Federal inspection services economically available to producers of diversified products, the Departments of Interior and Agriculture cross-license inspectors of the cooperating agency and thereby make possible an inspection service for all products with a single inspector at a given plant in most instances.

### BENEFITS OF INSPECTION

In this section, we first consider the services performed by the USDI inspectors and then the other benefits of inspection and certification.

SERVICES OF USDI INSPECTORS: The inspector's services vary according to the type of inspection requested. In the following presentation, the major responsibilities of the inspector are considered in terms of the value of the service to the processor at the plant.

Sanitation Expert: The first responsibility of the inspector is to act as a sanitation expert. He pinpoints and recommends ways to correct factors that may contribute to an unsanitary condition in the plant or that may result in the packing of a product containing foreign matter that is repulsive to the consumer or injurious to health. One of the inspector's primary functions is to see that a minimum amount of the product is classified as defective due to an unsanitary operation.

Experience has shown that the maintenance of good sanitary conditions makes a positive contribution to production in terms of value to the processor. The added discipline brought about by a good sanitation program spreads to other phases of the operation. The inspector's positive philosophy in that regard together with support by plant management improves the attitude and efficiency of the workers in the plant, minimizes losses brought about by spoilage of materials, and reduces the cost of operation.

Quality-Control Adviser: The second responsibility of the inspector is to act as a quality-control adviser. His function in this regard is to ensure that the quality of the raw material and of all components that go into the finished product are such that the resultant product will be wholesome. This function is of tremendous value to the processor. A number of instances have been reported where plants have received large quantities of frozen fish that did not meet the buyer's specifications. Upon the strength of the inspector's certification, the product was not accepted at the plants, thus saving the processor both time and money.

This role performed by the inspector can result in the development of interesting situations. For example, a report was received stating that a lot of frozen fish had been rejected for processing by one of our inspectors. Later, at another plant several hundred miles distant, a different inspector reported that he suddenly discovered a drastic decrease in the quality of the fish on the processing line. Upon investigation, he found that without his knowledge, there had been a change in the lot of frozen fish being processed. It turned out that the fish that had been rejected previously by the first inspector had been delivered to the second plant for processing and was again rejected. This action serves to illustrate the high level of uniformity and competency that the Bureau is working to achieve throughout the inspection service.

Observer: The third responsibility of the USDI inspectors is that of the friendly observer. He provides continuous surveillance throughout the plant during processing operations. His functions are to assist in maintaining a uniform product, to prevent any reduction in the quality of the product, and to eliminate any other factor or condition that may affect its marketability. Throughout the operation, he is concerned that the product is kept clean, uniform, and continuously moving. There are many ways in which this constant surveillance is of value to the processor. The following are but a few examples of instances where inspectors have provided assistance to the plant manager by calling his attention to situations such as:

1.	A toiletclogged and overflowing.	5.	The malfunctioning of a recording ther- mometer.
2.	A printing error on the product label.	6	Breading materials infested with insects
3.	Product containers being ruptured in	0.	Dreading materials messed with motors
0.	the packaging machine.	7.	Spoiled component materials.
4.	Packaged products that were under- weight.	8.	Foreign material entering the product.
		9.	Off-odor products on the packaging line.

Quality Assessor: The fourth responsibility of the USDI inspector is to sample the finished product and apply the appropriate standard or other buying specification. In performing this function, the inspector evaluates the over-all quality of the product and determines the degree to which it complies with the requirements of the pertinent document. This service is, of course, invaluable to the processor in that he receives an unbiased determination of the class, quality, quantity and condition of his product. He is also alerted to many additional factors that affect its marketability. Reporter: The fifth responsibility of the inspector is to report significant information to the plant manager. The following is typical of the kind of information given:

1. Reports of sanitation inspection, including recommendations for corrective action.

2. Reports regarding the condition, quality, and net weight (or count per pound in the case of frozen raw shrimp) of raw materials.

3. Certificates of quality and/or condition of all inspected products.

4. Reports of daily inspection of all products produced under inspection.

5. Product score sheets, which identify and indicate the frequency and severity of the specific factors that contribute to low quality of product or to poor workmanship.

OTHER BENEFITS OF INSPECTION AND CERTIFICATION: In addition to the value of inspection service at the plant level, inspection aids the processor in other ways, such as the following:

1. Product certification ensures, in large measure, the salability of the product.

2. Certification helps the processor to assure the buyer that he is getting a product of high quality.

3. Official certificates are accepted in all the courts in the land as prima facie evidence of fact. They are of primary importance therefore in the settlement of legal disputes or in the establishment of legal claims in cases of damaged merchandise.

4. Certificates of quality, together with warehouse receipts, can be used in obtaining inventory loans. The processor, in making application for a loan, can provide complete information with regard to the quality, the quantity, the value, and the expected shelf life of the product.

5. Of very significant benefit to the processor is the use of inspection symbols on labels and advertising material to promote consumer confidence and acceptance. The inspection shields become more meaningful to the housewife and to the institutional buyer as they recognize the inherent advantages of a standardized product of uniformly high quality. The stamps of government inspectors on a variety of products have long been used to assure the buyer of the purity, wholesomeness, and adherence to recognized standards and specifications of these products. The shields of quality used by the USDI now serve the same function in the field of fishery products.

# COST OF VOLUNTARY INSPECTION TO THE PROCESSOR

Except for the initial money appropriated for the establishment of the Inspection Program, the Inspection and Certification Service has operated essentially by means of reimbursements for services rendered. The services performed at the plant and the additional benefits have an estimated value of 20,000-25,000 to the plant per inspector per year. The actual cost for inspection services is a minimum of 9,250 per inspector per year. In most plants, this added cost to production varies between  $\frac{1}{4}$  to  $\frac{1}{10}$  of a cent per pound of fish processed in plants having an annual output of 3.5 to 16 million pounds. The cost thus actually is relatively small in comparison with the over-all value of the service to the processor.

## FUTURE EXPECTATIONS OF THE INSPECTION SERVICE

There is no magic market for inspected fishery products. The law of supply and demand works on those products just as it does on products that are not inspected. The inspected products, however, do have a sales advantage in that the buyer has greater confidence in the product. The Bureau has a dual responsibility in much of its work, and the inspection service is no exception. We must help to further the interest of the domestic fishing industry. At the same time, we are responsible to the consumer for encouraging him to purchase fish by building his confidence in products of predictably good quality at a fair price. The fact that the United States firms that produce 75-80 percent of the breaded shrimp and 65-70 percent of the fish sticks and portions have accepted this inspection service speaks well for progress on the first responsibility. On the consumer's side, such groups as state and Federal purchasing agents, distributors, and chain-store buyers have exhibited confidence in our service even to the extent of requesting the development of more standards and specifications and increased inspection service.

The USDI Fishery Inspection and Certification Service thus has now proved its value both to the consumer and to the fishing industry over a period of 5 years. We can expect, therefore, that it will continue to grow. As it does so and as we gain further experience, we can expect that it will be of even greater value to the consumer and to the industry than at present.

#### SUMMARY

Both the consumer and the industry have needed a nationally-recognized system for classifying the quality of packaged fishery products.

The legal basis for the establishment of such a system had its inception in the United States Warehouse Act of 1916 and was further strengthened by subsequent legislation in which the Agricultural Marketing Act of 1946 was a landmark.

The passage of the Saltonstall-Kennedy Act of 1954 then made funds available to develop standards for fishery products. Inspection and grading services became the responsibility of the Department of the Interior in July 1958. The objective of the service is to aid in the orderly marketing of wholesome products.

Currently there are grade standards for 12 fishery products. During the year ending June 30, 1963, over 210 million pounds of fishery products were inspected and certified-this represents 32 percent of all fishery products domestically-produced for human consumption exclusive of canned products.

The types of inspection available include continuous inspection and lot inspection. Also available is inspection of both agricultural and fishery products in the same plant. In providing these services, the inspectors have five basic responsibilities: they act as (1) sanitation experts, (2) quality-control advisers, (3) observers, (4) quality assessors and (5) reporters.

The services performed by the inspectors and the related advantages of the inspection system have an estimated value of \$20,000-\$25,000 to the plant per inspector per year. The cost for the service runs about \$9,000 per inspector per year.

Note: The following are available without charge from the Office of Information, U. S. Fish and Wildlife Service, Washington, D. C. 20240: Copies of U. S. Standards for Grades of Fishery Products, Regulations Governing Processed Fishery Products, and reprints of this article.



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As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States--now and in the future.