

DOWN WITH REJECTS--UP WITH PROFITS

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What is the U. S. Department of the Interior (USDI) Fishery Products Inspection Service and what does it mean to producers and processors? This is a voluntary inspection service which was founded to help the fishing industry and at the same time give the consumer high-quality fishery products. It is not a policing action! It is a program of assistance in quality control. Where defects in production processes are found, USDI inspectors try to assist by recommending corrective measures. Plant management voluntarily defrays the entire cost of the service. Only four years old, this program is still in the growing stage. Its early growth has been extremely gratifying because it demonstrates the confidence that the industry has placed in the Voluntary Federal Inspection Program. You may be a little surprised to know that the amount of frozen fishery products under USDI inspection in the United States is running well over 100 million pounds annually.

In the Gulf and South Atlantic Region specifically, about 47 million pounds of that 100 million pounds plus total are now made up of shrimp products carrying the USDI Inspection Shield. This includes nearly 80 percent of the breaded shrimp output in that area. Considering that breaded shrimp standards have been in effect barely two years, the quantity of shrimp now under inspection has reached an impressive record in volume. The number of shrimp-processing plants subscribing to the Inspection Service has also grown to 18.

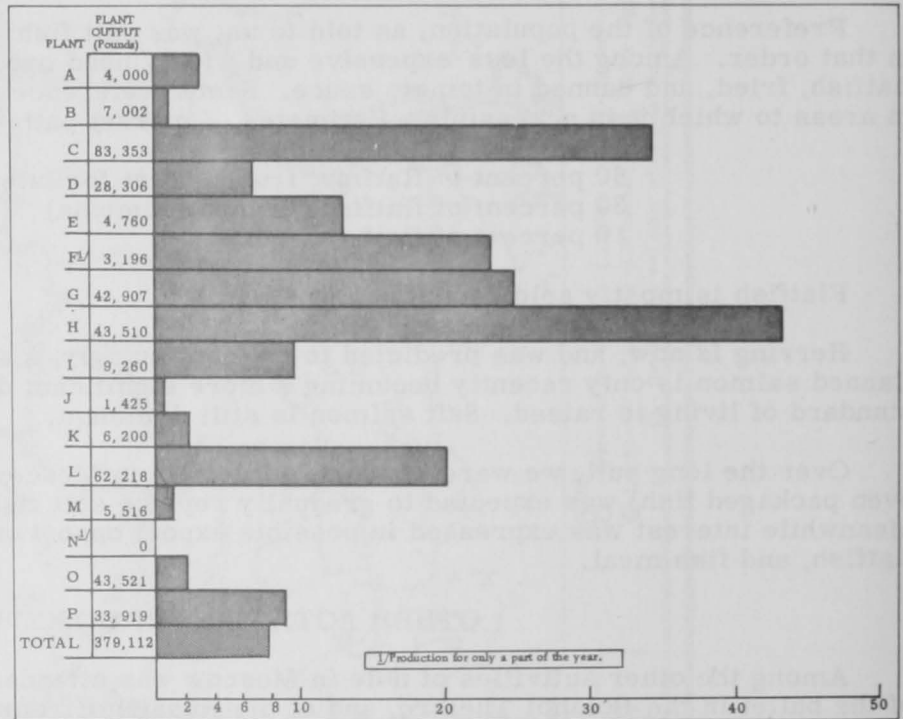


Fig. 1 - Rejection of shrimp at each plant under USDI Inspection, Gulf and South Atlantic, May 1959-April 1960.

All of this might well be called the shiny side of the inspection coin. Now let us turn it over and look at the other side which is a little less bright. Here, we find statistics on the amount of shrimp that has been thrown out of grade or rejected by USDI inspectors for various reasons. Some significant factors or trends have been revealed by an analysis of the weekly records on products rejected by USDI inspectors for the 12 months preceding June 1960. Remedial action would put some additional money into industry pocketbooks. Under today's competitive marketing conditions, everyone will no doubt endorse this idea.

To be exact, 379,112 pounds of shrimp and shrimp products were rejected or thrown out of grade during the 12 months (May 1959-April 1960) reviewed. Percentage-wise, this is not a large proportion of the total production; just about 1 percent. Dollar-wise, however, it could be a substantial amount, depending entirely on the method of disposal of the rejects.

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Note: Adapted from an address at the Shrimp Association of the Americas Annual Convention, Mexico City, June 25, 1960.

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FISH AND WILDLIFE SERVICE
SEP. NO. 606

The actual amount of loss in dollars becomes a little cloudy at this point since a product rejected or denied a grade shield is not a total loss if sold out of grade. Products merely out of grade because of certain defects are often sold at lower prices. On the other hand, some rejects reached a condition beyond salability and, undoubtedly, were or should have been discarded entirely. We have no way of pinpointing the exact dollar values involved. However, it is safe to say that if all products intended for Grade A remained in grade, their value would be substantially higher than if sold at a lower grade because of rejection at the time of processing or packing.

In order to analyze the figures, the various reasons for rejection of products were broken down into these six categories:

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|----------------------------------|-------------------------------------|
| 1. Decomposition | 4. Excessive breading |
| 2. Dehydration and deterioration | 5. Overloaded freezer or defrosting |
| 3. Low net weight | 6. Sanitation |

Decomposition for inspection purposes is defined as spoiled or unfit for food purposes. Dehydration is a condition of severe loss of moisture through mishandling. Deterioration is loss of quality, however, the product is well above the decomposition level and still suitable for human consumption. Low net weight means exactly that. Excessive breading is the term

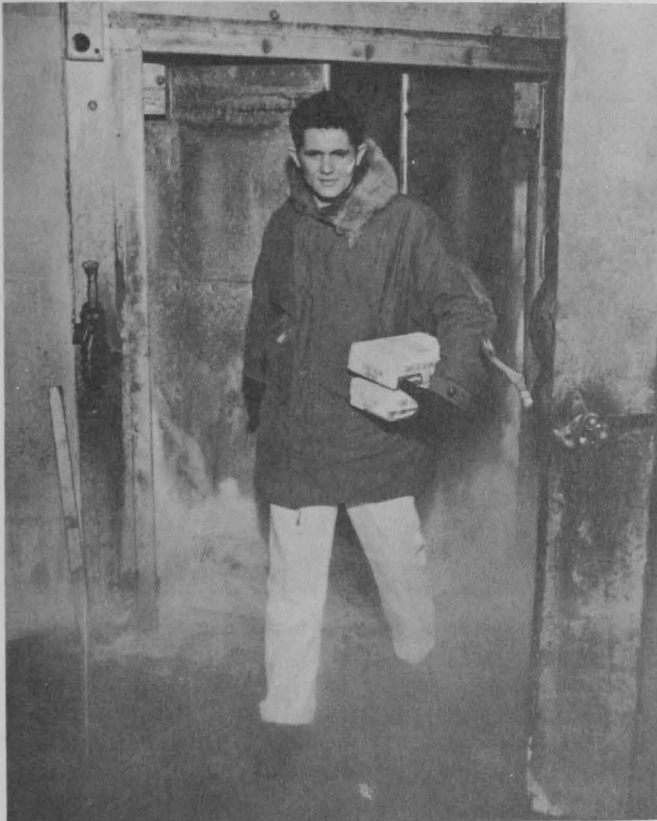


Fig. 2 - An integral part of a USDI inspector's duties--the drawing of official samples and checking blast-room temperatures.

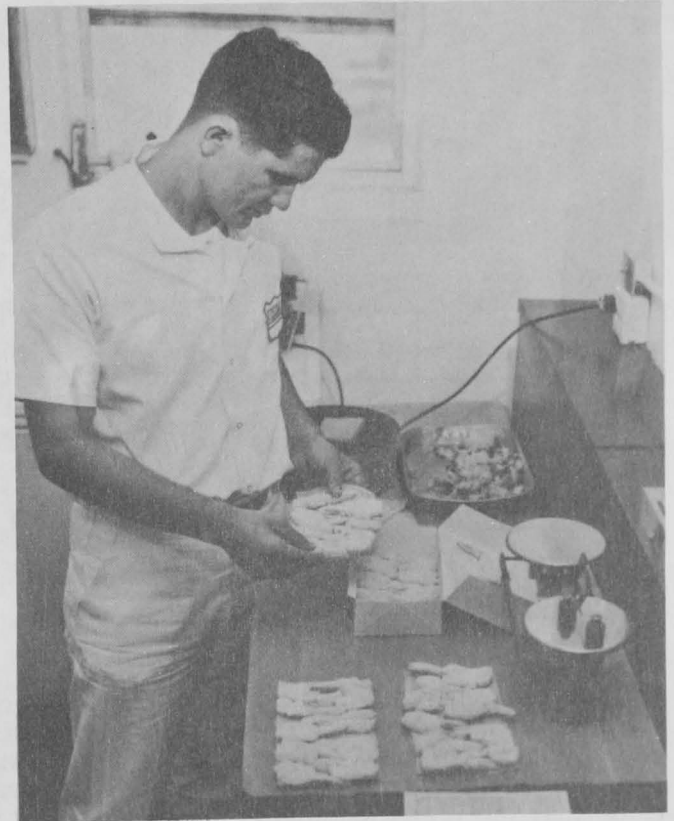


Fig. 3 - USDI inspector examining contents of package to determine condition of breading, excessive frost, and loose breading within package.

used where breading is in excess of 50 percent, including the 5 percent correction factor as permitted under the standards. Overloaded freezer means slow-freezing rate resulting in a poor-quality frozen product, and grouped with this is defrosting, a thawed-out product. Sanitation reflects the sanitary conditions of the product.

A further separation was made to show rejections by types, namely raw headless shrimp, peeled and deveined shrimp, and breaded shrimp.

The preponderance of the total pounds rejected stems from decomposition. Of the total of 379,112 pounds of processed shrimp rejected, 265,600 pounds were rejected because of decomposition. The rejections were mainly at the point of entry at the plant and show definitely that management had not been sufficiently cautious in purchasing shrimp for further processing. Perhaps some of this laxity can be attributed to the realization that raw products not up to quality can be resold or shunted off elsewhere. From any angle that you look at it, this is not a desirable practice and the frozen raw headless shrimp standards will furnish a device for correcting some of this situation. Under the new frozen standards, plant management will be able to buy domestically on U. S. Grade Standards or specify equivalents on foreign purchases. Compliance should reduce the reject figure materially and, at the same time, give management greater peace of mind about the quality of the materials entering the processing plants.

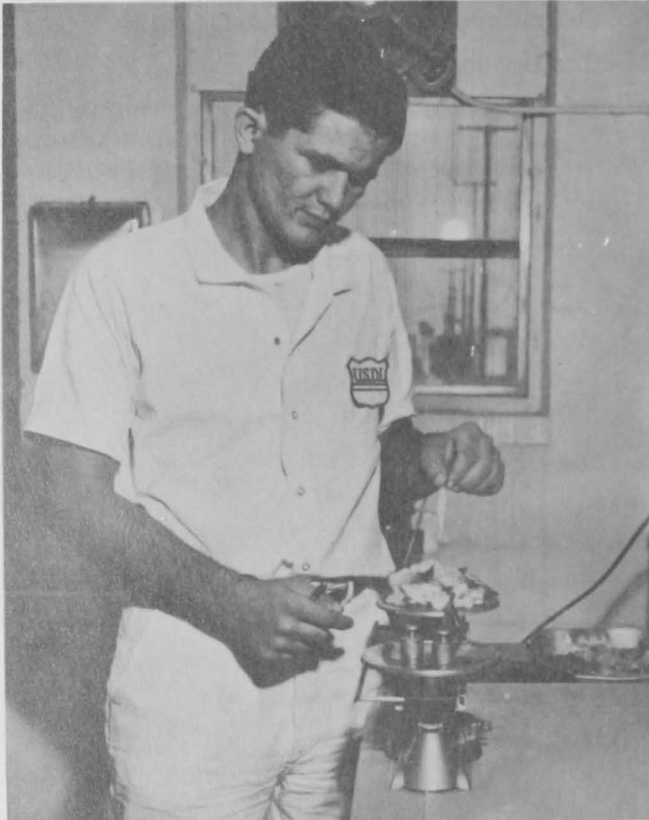


Fig. 4 - USDI inspector weighing debreaded shrimp to determine percentage of shrimp.

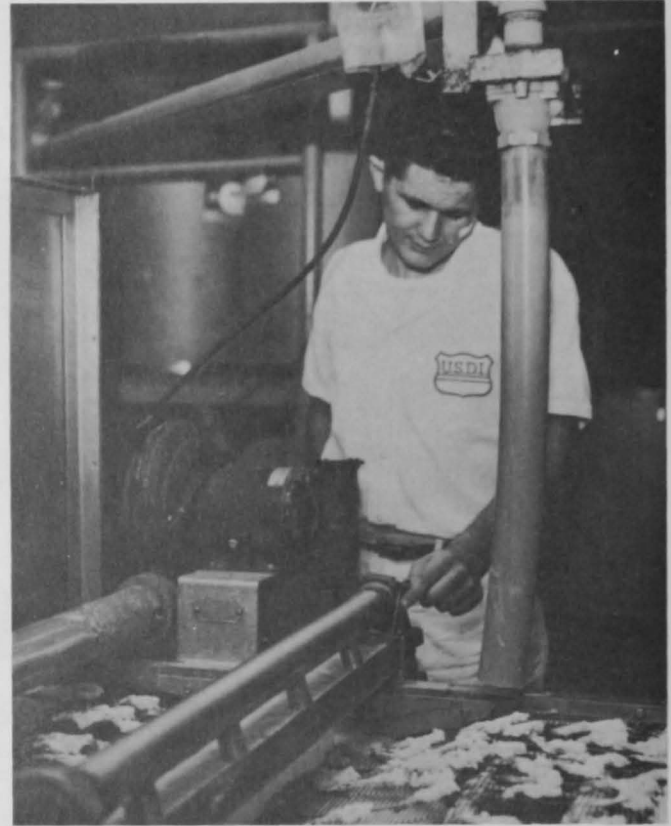


Fig. 5 - USDI inspector checking batter temperature to minimize bacterial growth.

Because of dehydration and deterioration, 79,022 pounds, representing 21 percent of the total were rejected. These two factors develop principally because of mishandling either at the boat level, in transporting, or during storage in the plant. Inspectors have constantly worked with management in recommending ways of reducing this figure. There are indications that the trend is moving downward, and the figures on these rejections should be substantially lower in the future.

Rejection for low net weight was very small--850 pounds. The important point here is that an inspector called attention to a faulty scale and incorrect weighing operation before much damage had been done. Alertness of the inspectors in instances such as this often saves management money. Short-weight charges are serious and costly.

Excessive breadding caused 21,900 pounds of the finished product to be thrown out of grade. This represents 6 percent of the total processed shrimp rejects. While many plants run close to the maximum breadding tolerance, some play the breadding percentage too closely

with resulting rejections for this reason. Inspectors keep a rather close check on breeding percentages during plant operations, and the inspector always intends to be helpful when advising management that the percentage of breeding is approaching the limit. In other words, he wants to see correction instead of rejection.

Some of the finished product goes out of grade because of freezer inadequacies--7,740 pounds, or 2 percent, were rejected because of overloaded freezer or defrosting. An overload in the freezer causes slow and improper freezing resulting in defects and a poor final product. Obviously, defrosting is damaging and, unless there is emergency, such as a freezer breakdown, most other factors can be controlled by proper handling and storing. Inspectors attempt to make suggestions for better techniques in this respect wherever improvements are indicated.

Finally, under sanitation there is only a single instance of rejection--4,000 pounds, or 1 percent. This is an isolated and rare case where insects had found their way into the breeding material. The product, of course, was completely unacceptable.

You might wonder if there is any pattern of distribution in the volume of rejects among shrimp-processing plants or if they are spread rather evenly throughout all plants under inspection. Figure 1 shows the percentage of rejects for the year as related to the individual output of 16 plants identified by code letters. It is readily apparent that the heavy burden of rejection falls on about five plants. The others seem to be consistently more observant of the requirements in meeting grade standards.



Fig. 6 - USDI inspector examining package coding for the purpose of identification.



THE FROZEN FOOD CODE AND THE RETAILER

The growth of the frozen food business will only continue if product quality and value are maintained. It is generally recognized that an extremely high percentage of frozen foods are of excellent quality when packed, but sufficient complaints from consumers are causing concern to the trade. The retailer is largely to blame; the greatest amount of abuse occurs at the retail level. In 1958 of 7,000 retail display cases checked, 30 percent were operating at temperatures above 5°F., 5 percent were from 16° to 25°F., and less than half had the desirable temperatures of 0°F. or lower.

The Frozen Food Retailers Code is in three main sections; definitions, equipment, and handling practices--each section has subsections. The code is comprehensive and covers all aspects from specifying a product temperature of 0°F. to the siting of the show case units, and the provision of backroom storage. In all, some 35 definitions and rules make up this code of practice. ("What the Retailer Must Know About the Frozen Food Code," article, Quick Frozen Foods, Oct. 1959, pp. 186-188.)