From time to time, a number of Marine Fisheries Review will be devoted largely to a single topic. In this number it is shrimp—a whale of a business.

## Shrimp '73-A Billion Dollar Business

PHILIP M. ROEDEL

It is a pleasure to visit the "heart" of the shrimp country and to meet with the Louisiana Shrimp Association. It is equally enjoyable to spend some time with one of the expanding, healthy segments of the seafood industry. In Washington we tend to be concerned mainly with the ills of the seafood industry and the international aspects which affect it. It was quite refreshing to look over the facts and figures on the shrimp industry. They are impressive, and I want to relate some of them to you today. Needless to say, all our 1972 data are preliminary estimates at this time. So let's take a look at the strong points and a couple of weak points in the shrimp market last year, and speculate on possible developments for this year.

The one word that most often chacterizes any shrimp year is "record" and 1972 was no exception. There were record landings, record imports, record sales, and a record carryover was left in cold storage to start the new year.

Let's look at landings first—234 million pounds, heads off, or about 1 million pounds over the 1971 high.

Even though Louisiana showed a decrease, here in the South you were able to squeeze out another 2 million pounds over the 1971 record. The catch in the South Atlantic States was off last year, but the Gulf States more than compensated for that drop.

The Louisiana catch was about 53 million pounds. White shrimp were off, and Louisiana's landings were down 5 million pounds as a result. Texas fared better. A 7-million-pound increase there made Texas the leading producer last

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year, a position Louisiana had held for the previous three years.

Northern shrimp, both Atlantic and Pacific, had another good year with 79 million pounds, heads off—6 million higher than the year before. For the past three years, northern shrimp has made up about a third of the total U.S. shrimp catch.

In New England, the catch was about the same as a year ago, and it appears that the catch has stabilized at 9 or 10 million pounds in Maine, and 4 or 5 million pounds in Massachusetts. Alaska was down for the first time in many years. A prolonged water shortage cut sharply into Kodiak's production. The shrimpers did not go after the quota allowed because the water shortage made it impossible to process it. The quota is set annually by the Alaska Department of Fish and Game. Future increases in Alaska production will probably have to come from areas beyond those fantastic shrimp beds near Kodiak, which have accounted for most of the State's production. Washington-Oregon-California had a great year. Production tripled, and more than compensated for the decline in Alaska.

How did the fisherman and the vessel owner fare in 1972? Our first estimate is that the total catch was worth \$195 mil-

lion—17 percent over the previous year. Even with a 5 or 6 percent increase in vessel operating costs, it appears the primary producer netted about 10 percent more last year. Our estimate breaks down to \$185 million for southern shrimp and \$9 million for northern shrimp—a 95 and 5 percent split, which is about the same as in recent years. I am sure many of you recall that it was in 1967 that shrimp became our first \$100 million fishery.

The preliminary totals for shrimp imports reached 223.2 million pounds, heads-off, which is an increase of about 8 million pounds over 1971, but a drop of 30 million pounds from the record high of 1970. I want to get into imports and the international aspects more when we take a look ahead.

Here in the Gulf States, the canned pack again topped 2 million cases, despite the relatively poor fall crop of white shrimp. In recent years, the Gulf pack has consistently been around 2 million cases while the pack in the Pacific Northwest and Alaska has been a little over 1 million. We have had a 50 percent increase in total canned shrimp production over the last 6 or 7 years. Apparently this has moved into the market with little disruption. Prices have not weakened, and I don't think there have been any serious inventory buildups.

Our first estimate of total shrimp consumption for 1972 is 420 million pounds heads off. This represents a 24 million pound or 6 percent increase over 1971. It also averages 1,150,000 pounds of raw headless shrimp per day. The total breaks down into 380 million pounds for fresh and frozen—a 21 million pound increase, and 40 million pounds for canned shrimp—a 3 million increase. On a per capita basis, it is slightly over 2 pounds per year.

SHRIMP CATCH BY REGION.

(Heads-off Weight)

Region	1969	1970	1971	1972 (est.)
	Million Pounds			
New				
England	16.0	13.3	13.9	14.0
South				
Atlantic	17.6	13.1	17.7	16.3
Gulf	125.3	145.1	141.8	143.7
Pacific	35.6	53.0	60.1	60.4
Total	194.5	224.5	233.5	234.1

Now let's put some dollar signs on these quantities. Frozen seafoods were worth \$1.5 billion in 1971, and frozen shrimp accounted for half of these sales. There can be no better proof of the growing demand for shrimp than the fact that the American consumer has been averaging 5 percent more consumption each year, and willing to pay 6 percent more for shrimp.

We in NMFS do not publish data on the final value of shrimp sales; however, I think we can work through some fairly reasonable estimates. Bear with me as I throw some figures at you. I found these estimates startling, and I wonder if you gentlemen are fully aware of the real value of the shrimp industry.

Every year *Quick Frozen Foods* magazine estimates the value of retail and institutional sales of frozen shrimp. The estimate was \$743 million in 1971.

Based on an increase in the quantity sold and higher prices, we estimate a 16 percent increase in the value of frozen shrimp sales. This would equal \$855 million for 1972.

We estimate consumption of canned shrimp at 18 million pounds at a retail price of \$2.50 per pound, with a value of another \$45 million. Our guess on fresh shrimp sales is about \$5 million. If my mathematics are correct, so far we have a total value of \$875 million for domestic shrimp sales, frozen, canned and fresh. Add in exports and we get a grand total of \$955 million.

I will make a prediction here today that in 1973 the shrimp industry is going to go substantially beyond \$1 billion in sales.

If you add in all the allied activities: trawler construction, maintenance, repairs, supplies, equipment and gear, expenditures overseas, the industry may well already have arrived at the \$1 billion level.

I repeat—no fishery in the United States or anywhere in the world can match the performance and sales of your

industry when it comes to value.

After painting this rosy picture, I should point out two areas of concern to me in 1973 and the years beyond. One is on the domestic side of the business and the other deals with the international competition in the world shrimp market.

First, breaded shrimp sales have been at 100 to 105 million pounds for several years. Neither the retail nor the institutional market has been able to get off the current plateau. It seems to me the industry needs to take another look at its marketing strategies and merchandising techniques if it wants breaded shrimp to break out of this 100-million-pound level. Let's look for new products, new uses, new and better marketing techniques.

Second is the intense international competition for shrimp. World shrimp catches are now nearing their maximum according to best available estimates of world shrimp production. It is conceivable that by the end of this decade—or shortly thereafter—world consumption will be equal to the maximum catches that can be attained.

A decade ago Japan realized that her domestic production would not be able to satisfy her growing demand for shrimp. Japan relaxed her import restrictions, and we all know the fantastic increases that have taken place. As in the United States, Japan's imports now exceed her domestic production. By the mid-1960's, Japan had embarked on an aggressive program of establishing joint ventures in shrimping all over the world. These are really beginning to pay off now, as evidenced by the tremendous quantities of shrimp flowing to Japan. In the past 18 months, Japan has probably been over-supplied with shrimp, but they have certainly laid the foundations of a continuing supply for the years to come.

A recent development in Tokyo involves a proposed request for a \$20

million increase in the Japanese Fishery Agency budget in 1973, along with an additional \$30 million credit fund. With these funds, they propose to set up an International Fisheries Cooperative Agency whose objectives are to:

- Assist the Government in concluding fishery agreements in foreign countries;
- 2. Promote overseas fisheries cooperation with various countries;
- 3. Send Japanese fisheries experts overseas when necessary; and
- Assist the Japanese fishing industry in concluding fisheries agreements in foreign countries.

This indicates to me that you are going to be faced with even stiffer Japanese competition in the years ahead.

Besides the United States and Japan, who account for half of the world's shrimp consumption, the other large trading area is western Europe. The population of the Common Market is now higher than that of the United States, and its combined economy is about 80 percent of the United States. Thus the Common Market represents a formidable competitor with the United States in the world shrimp market. I hope we are preparing for the challenges we face in the years ahead.

The possibility of shrimp harvests leveling-off in the next decade, while demand continues to climb, is quite real. Such shortages in natural supplies will force increasing attention to mariculture. As prices increase, the development and use of higher cost methods will be stimulated.

Shrimp mariculture, if commercially developed, may appear on the surface to many of you to be a threat. But, in the long run, it may turn out to be a blessing in disguise because it could help you to better meet the rapidly increasing demand, and thus prevent the pricing of shrimp products out of the market.

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