## The Gulf of Mexico Menhaden Fishery

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I am going to cover three points in this briefing on the background of the menhaden industry. First, I am going to give you a short history of the menhaden industry, then describe the processing operations and the products manufactured and conclude with some thoughts about why the industry took the initiative to deal with some of the problems confronting it.

To my knowledge, the first Louisiana menhaden processing plant was erected in Cameron Parish in 1941. Prior to that time plants had existed in Texas and Mississippi. World War II curtailed the Cameron Plant operations and it was abandoned shortly after being constructed. In 1946 another plant was built on the Calcasieu River about 1 mile west of Cameron, followed by a second plant in about 2 years; two more plants were constructed at Empire, Louisiana; in Plaquemines Parish in 1950. Today there are nine plants in Louisiana, one is inactive. Of three plants in Texas, two are active and one is inactive. There is also one inactive plant in Mississippi. So much for the history of the industry.

The normal menhaden season is short, starting in mid-April and terminating in mid-October. Fishing is not prohibited on Sundays. But through custom we do not, thus the number of days we are able to fish is reduced.

The very nature of our business requires us to conduct three different types of operations. We operate on the land, on the sea, and in the air. On the land fish are processed and fishing vessels supplied and repaired, in the air with spotter planes we locate the schools of menhaden and in the sea we catch the fish.

The larger manhaden vessels vary in length from 150 to 190 feet and each vessel is equipped with two smaller boats. They are diesel powered and carry a crew of 17. Purse seines are used to catch the fish. Half of this net is located in each of the two smaller purse boats. When fish are sighted from the air, the captain of the vessel is contacted by radio; in turn he tells the crew and the smaller boats are dropped into the water with the net. We proceed to the school of fish which is a surface fish. We cannot catch fish that are on the bottom. They have to be near the surface for us to catch them. Our nets are not equipped to drag the bottom. We fish strictly on the top. We circle the fish and purse the net. The fish are pumped from the net into the hold of the vessels where they are refrigerated until we return to the shore plant.

The fish are bony and oily and are not suitable for human consumption. In the plant the fish are cooked with steam, pressed to remove the water and oil and the pressed fish cake is dryed in hot air or by steam dryers. Oil is separated from the water and the water is concentrated in evaporators. This operation produces two principal products, meal and oil. The meal is used in poultry and swine feeds as a high quality protein supplement. The oil has quite a few industrial uses although in very minor quantities. The bulk of the oil produced in the Gulf of Mexico is exported to Europe where it is processed into margarine. Oil is exported strictly because U.S. Food and Drug does not permit its use as a food source in this country. Some work is being done that may change this situation.

The condensed water removed from cooked menhaden produces our third product called solubles. It is used in poultry and swine feeds and recently in liquid feed for cattle. This is a new area that is presently being expanded.

In 1972, 1.107 billion pounds of menhaden were produced in the Gulf; 910 million pounds about 82.2%, were landed in Louisiana. These fish were valued at \$18 million to the boats. The boats stationed in Louisiana received \$15 million of this. The value to Louisiana plants was almost \$11 million, and the total value to the boats and plants in Louisiana combined was just about \$25 million.

An estimated \$5.5 million was paid to the Louisiana fishermen and an estimated \$4 million was paid to the Louisiana plant employees. These figures were taken from the Current Fisheries Statistics No. 6100, published by the U.S. Department of Commerce, the National Marine Fisheries Service of Washington.

A total of eight plants operated in Louisiana in 1972. The total in the Gulf was 12. A total of 77 boats operated in the Gulf, and 56 were located in Louisiana. A total of 952 men were employed on the boats in Louisiana and approximately 600 in the plants. Boats were estimated to have a value of \$23 million and the plants \$25 million. I have calculated costs of the average boat operation, as well as the average plant operation. These figures show that 40% of every expense dollar was paid to plant employees for salaries and wages and 42% of every expense dollar was paid to crews for salaries and wages.

Now, I want to point out how important the menhaden industry is to the state and the nation. In 1972 in terms of pounds of fishery products landed, four of the top six ports in the U.S. were located in Louisiana: Cameron, Dulac-Chauvin, Empire and Morgan City. So, it is quite an industry to the State of Louisiana.

In value of fishery products landed, naturally, those ports did not rank as high, because menhaden is relatively cheap compared with edible fish. Even so, in 1972, 4 of the first 14 ports in this country, having highest valued landings were Dulac-Chavin, 8th; Cameron, 10th; Morgan City, 13th; and Empire, 14th.

Menhaden contribute greatly to this outstanding record for Louisiana. 37.4% of the total quantity of fishery products landed in the United States and 5.6% of the total value resulted from menhaden. This has a definite bearing on many federal funds allocated to our State. Some of these are alloted to the National Marine Fisheries Service, the Corps of Engineers, and the Coast Guard. All of these funds are in some way related to the tonnage of fishery products landed in Louisiana.

We have in our State and in the Gulf of Mexico, a healthy viable industry that creates new wealth for Louisiana and other Gulf States. We have taken an inedible fish and turned it into a highly valuable and much sought protein product and into oil used in margarine. Would it not be reasonable that an industry this large, this desirable, this exposed to the problems on the land, on

the sea and in the air would attempt to try to protect this industry by planning programs that would tend to insure its continued prosperity?

For many, many years I have personally worked to unite the industry so we could set certain restrictions and regulations that would be beneficial in the long run to our industry. We did not want to wait until the industry felt the effects of over fishing, and other problems. We believed it mandatory that we agree on measures of conservation and make them available to management authorities responsible for the resource.

With this in mind I went before the Wild Life and Fisheries Commission and asked them to establish opening and closing dates for menhaden taken in state waters and processed in Louisiana plants. All Louisiana processors were agreeable. We had no intention of bringing any pressure on Mississippi, Texas, Alabama or Florida or anyone else. We believed it was in our best interest to recommend measures to protect our industry. The Commission immediately advised me that they had no biological data to support such a season. We admitted we had no biological data, but that 25 years of operating experience showed that too early an opening date only costs money and a too late closing date only costs money.

The Commission cooperated with us and through administrative procedures implemented an Executive Order restricting the season for taking menhaden and setting the opening date as the second Monday in April and the closing date the second Tuesday in October. I am glad that I can report to you today that these dates were very advantageous to our industry. If in the future, additional regulations are necessary, we believe industry should have input into such a situation. If we can become knowledgeable enough to be able to make the proper recommendations to preserve our resource, then resource management will be most effective. We do not discount the fact that biological studies will be helpful. In fact, substantial biological research on Gulf menhaden has already been conducted by NMFS.

I have at this point, brought to you some background and history of the menhaden industry. I have reported our need for seasonal regulations which were set by the Louisiana Wildlife and Fisheries Commission and the success of these regulations during the 1973 fishing season. Hopefully we will make further progress in management by getting input from all facets of the government and from the willing cooperation of industry.