

# Fergus Family Has Operated Fish Business for 40 Years

Robert Fergus of Wilmington operates a fish business which has over a period of 40 years been run by three generations of his family.

The size of the plant has grown considerably since the company was founded in 1915 by D. J. Fergus, grandfather of the present owner. The present plant, a brick structure, occupies about a fourth of a city block on Water Street near the Cape Fear River in Wilmington.

The first owner bought from independent fishermen and shipped mostly by railway express. He operated the firm until his son, R. C., father of the present operator, took over in 1933.

Today the firm still buys from independents, but operates a fleet of insulated trucks, including two ten-wheelers, and two five-ton trucks which service regular retail outlets as far away as Charlotte, N. C., and Myrtle Beach, S. C. The firm also ships a great deal of seafood to Virginia and the northern markets.

Owning no boats, Fergus buys from the entire east coast and the Great Lakes region as well. Out-of-state buying is particularly heavy during the spring and summer, which is the off-season for fish in this area. Spots and mullets taken in beach seines in the Wilmington area, supply much of the firm's stock in the fall.

Oysters are handled the year round. They are obtained in the summer months from out-of-state producers.

The Water Street plant includes cold storage space, a freezer, and frozen storage space for 2,000 pounds of seafood.

The company has been engaged in freezing operations 10 years, processing as much as 4,200 pounds



J. G. Benfield ... manages plant

of food daily at 40 degrees below zero F. Fish is packaged and frozen in 25-pound lots, chiefly for the firm's own use in servicing customers. Other frozen seafood includes shrimp, scallops, and clams.

Mr. Fergus says his company handles about five times as much

seafood as it did 15 years ago. A large proportion of the increase he attributes to the freezing operation.

**Operations Short-Lived**  
A line which the company tried for over a year at the end of the war, but has since abandoned, was the cooking and peeling of shrimp for restaurants and the northern market. A crab picking operation for the same market was also short-lived.

A four-ton flake ice machine supplies a part of the ice used for wet packing of various products.

J. G. Benfield, a longtime employee who originally came from Gaston County, is general manager of the firm.

**Started as Youth**  
The company's genial owner, Robert Fergus, has been working in the family enterprise since he was in high school. A part-time job during his school days interested him enough to bring him into the business full time after his graduation from New Hanover High School. Robert first ran a retail market for the firm for about five years, until 1940.

From 1944 until 1947, Robert and his brother, Eldridge, worked as partners with their father, R. C. Upon the death of their father, who had run the business since 1933, the two brothers continued the partnership.

Two other brothers had strayed from the family business. One, Leroy, is practicing medicine in California, having graduated from

Duke University and the Medical College of Virginia. Another, D. J., a graduate of North Carolina State College, is employed as a metallurgist in Cleveland.

**Buys Out Brother**  
In 1951 Robert bought out the interest of his brother, who now operates the Fergus Ark restaurant, a unique floating dining establishment on Wilmington's waterfront.

Among Robert's other interests is the 1,025-foot Fisherman's Steel Fishing Pier at Carolina Beach. His father served as mayor of the beach for 12 years. His partner in the fishing pier is J. R. Bame of Carolina Beach.

## Fall Fishery Starts



When the wind first shifts around to the north in the early fall, that is the signal for the beach haulers to dip their nets into the sea. Here a crew hauls in a net at Bogue Banks, off Morehead City. After the fish are taken from the net, they're loaded on trucks and taken to Morehead City fish houses.

## Catches Drop; Dollar Value of Fish Increases

While the total number of pounds of fish produced in the United States and Alaska has dropped since 1942, the value to the fisherman has more than doubled. In 1941 there were 4,900,000,000 pounds of fish valued at \$129,000,000 to the fisherman. In 1952 there were 4,418,442,000 pounds landed with a value of \$360,135,000. The average price per pound in 1941 was 2.63 cents while the average price per pound in 1952 was 8.15 cents.

## Unique Industry

The soft shelled crab industry in North Carolina was developed between 1890 and 1895 by fishermen and dealers in Carteret County. They began shipping soft-shelled crabs to the northern market. This industry is still located almost entirely within the confines of Carteret County, the Core Sound section being the heaviest producing area.

## Oyster Types Vary Throughout World

By DR. A. F. CHESTNUT

There are many different kinds of oysters found growing in various parts of the world. Some species such as the dwarf oysters, which are found in North Carolina near the inlets and in the ocean are of no commercial importance.

The common eastern oysters, known scientifically as *Crassostrea virginica* are found distributed from Canada southward along the Atlantic and Gulf coast into Mexico. They are generally found in the bays and sounds where there is a mixture of fresh and salt waters.

The oyster is one of the best known marine animals. This is undoubtedly the result of many studies which were stimulated by the economic importance of the animal. Studies are being conducted in this country along the coasts in each area where oysters are produced in commercial quantities. Various problems are being studied by a greater number of workers than ever before in the past.

### Three Major Problems

In general, the problems can be grouped into three major categories and are similar to the basic problems of the land farmer. The first problem is the production of seed or small oysters. The second problem is concerned with the growth and protection of the small oysters until they reach marketable size. The third problem is in harvesting.

Various projects undertaken by the Institute of Fisheries Research for the past several years have been directed toward answering specific questions in each of the three major problems. Basic information is necessary if intelligent programs of conservation and development are to be formulated and carried out.

An understanding of the biology and life history of the oyster is essential to the operation of the industry and such studies have been successfully applied in many areas to assist those engaged in the cultivation of oysters.

It is necessary to know of the spawning and early development of oysters in order to obtain a supply of seed oysters. During the spring months of April and May, the oysters in North Carolina develop spawn which is commonly called milk. Each oyster is of separate sex but may change its sex from year to year.

The eggs and sperm are released into the surrounding waters when spawning is initiated. A single female oyster may release as many as 150 million eggs during one summer. Studies at the Institute of Fisheries Research have shown that spawning occurs after the water temperatures have risen above 68 degrees F. and the heaviest spawning occurs when the water temperatures continue to rise to about 78 degrees F.

Temperatures are not the only factor controlling spawning for it has been found that hormones, salt content, tidal cycles and other still unknown factors exert an influence upon spawning. In North Carolina spawning begins about the middle of May and continues through September.

Peaks of heavy spawning are found at irregular intervals, frequently following a sharp rise in temperature.

### Larval Swim

A few hours after the eggs are fertilized, microscopic larval oysters develop that are capable of swimming. Gradual changes take place for approximately two weeks, as the larval oysters swim and

crawl about or are passively carried by the strong currents. When the larval oysters mature they attach by cementing themselves to such materials as shell, rock, glass, wood, rubber or metal objects.

Before attachment they crawl about for a few hours and are capable of selecting a particular location. This has been demonstrated by studies at the Institute in an effort to determine whether certain types of material may be more suitable than others for the setting of oysters. This period of attachment is considered the most critical period in the life history of the oyster.

The larval oysters will perish if suitable materials are not present to which they can attach. Since adult oysters do not move about, the particular location where the larval oysters have attached may determine whether they will survive to grow to marketable size.

Oyster dealers are required by law to return to the state 50 per cent of the shells that result from the harvest of oysters. These shells are scattered on the public areas to provide material to which the young oysters may attach. This shell planting program is part of the oyster rehabilitation program that is carried on by the Division of Commercial Fisheries of the Board of Conservation and Development in an effort to maintain the productivity of the natural beds.

It is important that shell plantings correspond as closely as possible to the time when setting will take place. In some areas sediment and silt may cover any material placed on the bottom and in other areas heavy growths of plant and animal forms cover the shells and inhibit the setting of oysters.

### Few Survive

It has been estimated that less than 10 per cent of the millions of eggs that are spawned live through the larval stage. The final survival of the set that takes place has been estimated to be less than one per cent of the initial spawning.

A successful set is dependent upon the number of parent oysters present to provide spawn, the abundance of animal forms that filter the water for their food and consume many larval oysters, weather conditions, and the presence of suitable materials on the bottom for attachment of young oysters.

At the time of setting, the young oysters are smaller than the size of a pinhead. Growth is rapid for the next several weeks and in one month they may grow to an inch in length. Market-size oysters may be produced in North Carolina waters in about three years. As the oysters grow they are subject to attack by many enemies and are influenced by weather conditions.

Oysters growing on soft mud bottom may be smothered as they sink into the bottom with increase in weight. Sand bottoms and shoals are not desirable for the bottoms are liable to shift in times of gales and strong currents. Drastic changes in the salt content of the water following heavy rains may lower the salinity to a level that will kill the oysters.

Many animals such as barnacles and mussels compete with oysters for food and space. There are many predatory animals that feed upon oysters. Small snails called oyster drills are capable of drilling a small hole through the shell. A single drill may kill 300 oysters in a season.

In some areas of Brunswick

County as many as 13 drills per square foot have been found. Crabs and some fish can break the shells of an oyster and frequently cause much damage. One small blue crab was found to kill 14 one-inch oysters in two days.

A number of animals grow and live in association with oysters and may indirectly injure oysters through their normal activities. The boring sponge which perforates the shells is a serious problem in many of our coastal areas. Mud worms form blisters inside the shells and frequently weaken the oysters.

The small oyster crab which lives inside the shells usually feeds upon material that the oyster is rejecting and may at times feed upon the oyster and cause serious damage. Some parasites, not harmful to any other forms, often invade the tissues and kill or weaken the oysters so they cannot withstand adverse conditions.

### Areas Differ

The areas where oysters are found in North Carolina vary considerably in tidal fluctuations, salt content, bottom conditions, presence of enemies, and types of oysters. The various sounds and tributaries from Roanoke Island to the South Carolina line have their own peculiar problems.

In Brunswick County the tidal range is from 4 to 6 feet and the marketable oysters are gathered by hand from exposed reefs on low water. Heavy infestations of boring sponge and large numbers of oyster drills appear to be the factors that limit the growth and survival of oysters below low water. This is true of some areas in Carteret County.

The greatest concentration of privately-leased oyster beds is found in Pender, Onslow and Carteret Counties. In these areas the oysters are generally growing in shallow waters of 3 to 8 feet in depth and the oysters are harvested with scissor-like tongs.

In Pamlico Sound which provides over 90 per cent of the total oyster production of North Carolina, there are extensive public areas and the oysters are growing in waters from a few feet to over 20 feet in depth.

The oysters are harvested with oyster dredges which are towed by various sized boats. The currents in Pamlico Sound are weak and except in the immediate vicinity of the inlets, the tides are negligible and are governed primarily by the winds.

The need for accurate, unbiased information is essential in the development of an industry based upon a natural resource. This is particularly true of the oyster industry in North Carolina where the diversified nature of the oyster producing areas requires separate investigations of each locality.

Information and current practices from other coastal areas are not always the best suited for our local needs. Through continued research and applications of the findings, many of the problems can be solved.

### Frozen Fish Rejected

Prejudices retarded the sale of frozen fish in the 1920's. It was difficult for salesmen to convince their customers that frozen fish were as good as fish which were packed in ice. One large company in New England built its name and its success by selling only fresh fish. Their motto was, "Always Fresh; Never Frozen."

# This is no "FISH STORY"!



It's a fast-moving business opportunity that abounds in the teeming fishing waters of Coastal Carolina. Carolinians, quick to spot such opportunity, have already started to reel in profits from commercial fishing and its by-products.

But — catching the fish is just the beginning these days. The wide open profit potential is in the processing, freezing, packaging and marketing of the catch itself. This is true of fish as a food product and in its uses for medicinal and agricultural purposes.

Here's why the opportunity is so great at this time. Carolina-caught fish and shellfish, worth millions of dollars, are still shipped out of the State every year. There they are processed, packaged and shipped to retail markets — including Carolina Markets! What happens? You purchase, at higher retail prices, the seafood that came from your own coastal waters.

So let's keep this booming, young industry

here at home. It means more jobs — more paychecks — greater opportunities for all of us. Modern food-processing equipment and marketing methods have flung wide the door to profits in this field. North Carolina's Dept. of Conservation and Development, and particularly its Small Industries Section, are ready to help you develop and expand this new business potential. They will counsel with you at no obligation.

Naturally, any native, booming industry is of interest to us at CP&L because our future is the future of the area we serve. Electric power needs increase in proportion to the progress of any area. We must plan and build to meet those needs.

To this end, CP&L will have invested \$206,000,000 in its post-war expansion program through 1957. This, too, is no "fish story" . . . it is tangible evidence of our faith in the future of the Carolinas and in Carolinians.

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