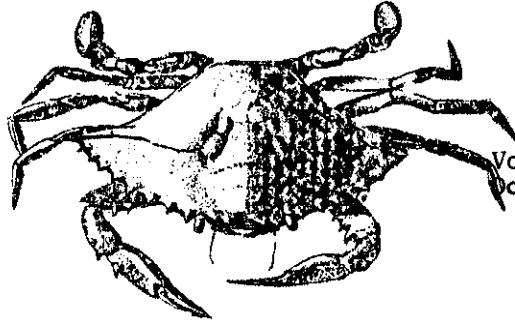


# LOUISIANA COOPERATIVE EXTENSION SERVICE

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## SEA GRANT PROGRAM



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## LAGNIAPPE

### CHOLERA

This crab-cholera scare is the biggest shake-up in the seafood industry since the oyster-hepatitis episode. The unfortunate thing is that even though the commercial seafood industry wasn't involved in one case, they are the ones taking it on the chin.

The crabs suspected of causing the cholera did not come from commercial fishermen and they were cooked at home, not at a seafood dealer. However, the scare has caused people to slow down on their buying of crabs and this hurts the industry.

Incidentally, cholera is not the dreaded deadly disease that rumor would have you believe. This is a very easily treated disease and it's most serious symptom is strong diarrhea.

In the meantime, just to be safe, DO boil your crabs at least 15 minutes and DON'T put the boiled crabs back in the same container that the live ones were in. Also, DON'T reuse ice that was on live crabs.

### UNDERWATER OBSTRUCTIONS PROJECT

One of most important projects concerning commercial shrimp fishermen in Louisiana is beginning this month. The goal of this project is to identify underwater obstructions in Louisiana waters. These obstructions often called snags, hangs or hook-ups are the cause of thousands and thousands of dollars worth of lost shrimp trawls in the state every year.

The organization which is conducting this project is the LOUISIANA FISHERIES FEDERATION, statewide organization of commercial fishermen and seafood dealers. They will be looking for the cooperation and help of all commercial fishermen on this problem.

Perhaps with after mapping and locating these snags, more money will be available to pull or at least mark them. Anyone with questions on this project, can find out more by calling the Federation office in Baton Rouge at (504) 344-7306. A full time secretary is on staff.

### TOO MUCH OF A GOOD THING

We are all conscious now days of water pollution and fish kills. Many things can cause fish kills, but in France recently they came up with a new twist. The Meuzin River in eastern France was the river involved and fish were killed over a 12-mile length.

The kicker is that the kill was caused by a wine company employee who was mad at his boss. The employee poured \$600,000 worth of Burgundy down the drain to get even with his employer. Source: Conservation News.

## SIMPLE WATER TESTER

One thing that many commercial catfishermen who fish the shallow lakes of south Louisiana have seen is fish kills. While some fish kills do occur because of pollution, probably many more occur because the water has little or no oxygen. Sometimes not all of the water is bad, just a layer 2 or 3 feet thick on the bottom.

When fishermen see a fish kill, they are often curious about what caused it. By the time a biologist gets out to the area with a fancy water tester, things have changed.

There is a real simple way to tell if low oxygen was the fish killer though. All you need is a stick of freshly cut oak as long as the water is deep. These are often found as scraps where slat traps are made.

Just stick the stick down and poke it in the mud so it stands upright. Anywhere between 5 and 30 minutes later come back, pull it up and look at it. The depths at which there is no oxygen the light-colored oak will turn dark. The longer it is in the water over 5 minutes, the darker it will be. The depth where there is enough oxygen for fish to live will still be light-colored. It'll work every time, just remember to use oak.

## PREDICTING THE BROWN SHRIMP CROP

Shrimp is the number one seafood in Louisiana, so naturally much of the research done on commercial fisheries is on shrimp. Since the shrimp crop is so important, the Louisiana Department of Wildlife and Fisheries has spent quite a bit of time in studying just what affects the size of our brown shrimp crop.

According to the biologists, the three factors which most affect the size of the brown shrimp crop are temperature, rainfall and Mississippi River level. The biologists have found that the number of hours of water temperatures below 68°F after the first week of April in the marsh is an important factor in shrimp production. If we have more than 100 hours of this cool weather, it usually causes lower production. If we have less than 33 hours of water temperatures below 68°F, then shrimp production tends to be better.

However, just temperature alone doesn't determine the shrimp harvest. Research in Barataria-Caminada Bays has shown that baby brown shrimp grow best in water that is one-half to two-thirds the salinity of seawater.

Too much rainfall will sweeten the water in the upper bays, too much and high Mississippi River flows will freshen the low bays. It seems therefore, that the amount of rain and the level of the Mississippi River during the spring along with water temperature directly affects brown shrimp production in May.

Source: Primary Factors Which Influence Commercial Shrimp Production in Coastal Louisiana. B.S. Barrett and M.C. Gillespie. Louisiana Wildlife and Fisheries Commission Technical Bulletin No. 9 1973.

## LIME IN CRAWFISH PONDS

The hard outside shell of a crawfish is composed minerals which the crawfish has to get from the water and soil. However, many crawfish ponds are built on reclaimed or drained marshland soils. These soils produce water in ponds which may be acid and soft. It has been found that adding lime to a pond can increase production up to 50% and also give the crawfish harder shells. With harder shells they can take a little rougher handling.

Source: Liming Increases Crawfish Production. Larry de la Bretonne, Jr. and J. W. Avault, Jr.

### IT'S A FROG'S LIFE

The Fund for Animals, a Washington based outfit out to stop all hunting and fishing, has done it again.

This time they are charging that frogs used in the frog-jumping contest in Calaveras County, California are being treated cruelly. They charge that the frogs are being jumped at and yelled at to make them jump farther.

The Fund also charges that after the contest some of the frogs are actually eaten. If these people ever found out what happens to the frogs Louisiana froggers get, they would "shore nuff have a fit."

Source: Wildlife in North Carolina. August 1978.

### SPORTS FISHING SURVEY

During the recent gill net controversy each side claimed that the other one was catching the most fish. Many people claimed that the landing figures for sports fishermen were not correct, some said high others said low.

The National Marine Fisheries Service has just announced that contracts were signed on September 28, 1978 to begin the National Marine Recreational Fishery Statistics Survey. The purpose of this survey is to determine how many people sport fish and how much they catch. This will not only include fish, but shrimp and other shellfish. The survey should be done in 16 months.

### MARSH CATFISH

Since the passage of the "gill net law" a year and a half ago, speckled trout and redfish have become almost impossible to find in retail seafood markets in New Orleans. However, more and more markets are carrying fresh catfish. Catfish always has been a highly desirable fish in northern and central Louisiana.

While catfish are most highly prized in those parts of the state, the southern part of the state has always been known for tremendous numbers of catfish and a larger average size.

Often people have asked me why blue and channel catfish seem to be more common in the marshes than in north Louisiana rivers and lakes. Maybe the answer is in the amount of food available for them. In 1969, Guthrie Perry with the Department of Wildlife and Fisheries, sampled the food habits of blue (white) catfish and channel (eel) catfish in the marsh. He found that over  $\frac{1}{4}$  of the diet of marsh blue cats are shrimp and over  $\frac{1}{7}$  is crabs. Since crabs and shrimp (except a few fresh water shrimp) are not found in the hills of north Louisiana, this could be one reason for the difference. Source: Food habits of blue and channel catfish collected from a brackish-water habitat. W. Guthrie Perry, Jr. The Progressive Fish-Culturist. Volume 31, Number 1. 1969.

### CRAWFISH INTERNATIONAL

We here in Louisiana really love our crawfish. When you think of crawfish, you think of Louisiana. Maybe this is only natural since we produce 99% of the commercial crawfish harvest in the U.S. and we eat 95% of the crawfish consumed in this country.

However, crawfish are found in every continent on earth except Africa. There are over 300 different kinds of crawfish known worldwide. Louisiana alone has 29 different kinds. Even so, just about all the crawfish eaten here are of two kinds, the red swamp crawfish and the white river crawfish.

Crawfish range in size from the American dwarf crawfish which never gets bigger than one inch to the Tasmanian crawfish which gets up to 8 pounds. While Louisiana harvests the most crawfish, people in a few other parts of the United States like to eat crawfish too.

In California, crawfish are caught both as food for humans and as bait for big brown trout. California does not produce as many crawfish as Oregon though. Crawfish are very common there especially in the western part of the state and Oregon comes in second to Louisiana in harvest. There is no season, but fishermen are limited to 12 dozen crawfish per day.

In the state of Washington where crawfish are also fished for, a special permit is required and crawfishermen can only fish in certain places. They must also use traps and not nets and they have a size limit of 3½ inches. The legal open season runs from April through October.

The only state in the east where crawfish are commercially valuable is Wisconsin. However, crawfish are very common all through the east and are commonly used as bait.

Finally, crawfish are widely eaten in Europe. Countries such as Poland, France, Finland and Sweden all have a crawfish eating heritage. However, crawfish lovers have fallen upon hard times since the spread of a type of mold which wipes out whole populations of crawfish. This shortage of crawfish in Europe has caused a lot of people to attempt overseas shipments of Louisiana crawfish. So far, no one has made this successful. Air freight costs are very high and as it turns out, the Europeans are much more "picky" about the size and quality of their crawfish than we are.

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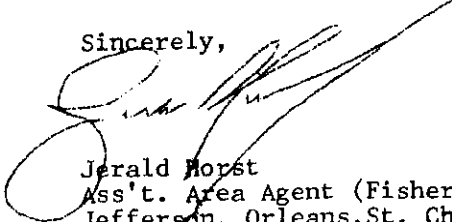
#### THE GUMBO POT

##### Imperial Crab Newport

1 lb. claw crab meat	½ cup bread crumbs
1 lb. flounder fillet	½ cup milk
3 tbsp. chopped onion	½ cup flounder broth
1 tbsp. lemon juice	¾ tsp. salt
4 tbsp. butter or other fat	½ tsp. Worcestershire
4 tbsp. flour	Dash of tabasco

(May use artificial or natural crab shells or in casserole)  
Boil flounder in 1 pt. of water with ½ tsp. salt only if it will flake. Pour off broth and save ½ cup. Cook onion in butter until tender, and blend in flour. Add ½ cup milk and ½ cup flounder broth and cook until thick, stirring constantly. Flake the cooked flounder fillet, and remove any shell from crab meat. Carefully tumble them together with ½ cup bread crumbs. Add seasonings, flounder flakes and crab meat to sauce and carefully mix. Place in about 12 greased crab shells, artificial shells or custard cups. Bake at about 350° for 20-25 minutes or until slightly brown. To serve as casserole, you may top with buttered crumbs and bake at 350° for about 30 minutes. Serves 12.

Sincerely,

  
Jerald Hopst  
Ass't. Area Agent (Fisheries)  
Jefferson, Orleans, St. Charles

The Louisiana Cooperative Extension Service follows a non-discriminatory policy in programs and employment.