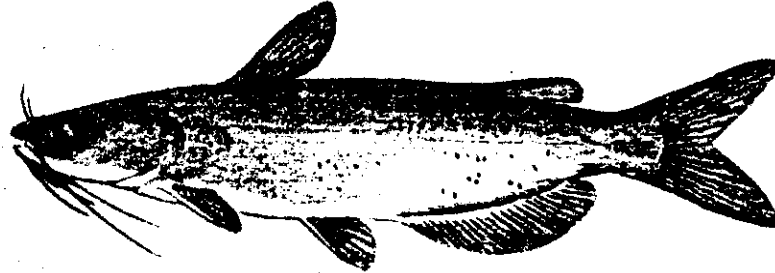


SEA GRANT PROGRAM



LAGNIAPPE

AFFIDAVIT FOR TAX EXEMPTION

Enclosed in the envelope with this month's newsletter is an affidavit form that will have to be filled out and notarized before a commercial fisherman can get his new commercial fisherman's sales tax exemption card for next year.

Send the signed and notarized affidavit in with your old card to the Department of Wildlife and Fisheries when you order your commercial fishing licenses. This is a new law passed by the 1984 Louisiana State Legislature.

MORE SULFITE NEWS ON SHRIMP

The controversy over the use of sodium bisulfite (shrimp powder) is still going on. Recently the Center for Science in the Public Interest has asked for faster action on the use of sulfites on foods.

They leveled criticism at a report on sulfites in foods by the Federation of American Societies for Experimental Biology calling the report "a waste of time and, in effect, a death sentence for many sulfite sensitive people". The center said in a news release that the report should be revised to recommend "that FDA ban all unnecessary uses of sulfites and severely restrict usage levels and require prominent labeling of products in which sulfite serves an important and irreplaceable function".

In a separate action, FDA on October revised an import alert dealing with sulfites on shrimp to adopt a limit of 40 parts per million (ppm). FDA district offices have been asked to sample as close to 100% as possible of all imported shrimp for too much sulfites. Recently a shipment of Spanish shrimp were found to have over 300 ppm sulfites. FDA has also determined that some Brazilian shrimp had overly high levels of sulfites.

As controversy over the use of sulfites heats up it is very important that Louisiana shrimpers use sodium bisulfite properly. Considering the economic problems that the shrimp industry is facing the last thing that is needed is a sulfite scare.

Source: Food Chemical News 10/19/84.

FARM RAISED CATFISH INDUSTRY

The catfish farming industry in the United States has grown rapidly in the last fifteen years. It is located primarily in the Delta country of Mississippi and Arkansas and in northwestern Alabama. In Louisiana catfish farming is smaller, but the state is a heavy producer of wild catfish, especially from the Mississippi and Red Rivers, the Atchafalaya Basin, and the Des Allemands area.

The figures below show how large catfish farming has become. The figures listed are for pounds sold to processing plants, so actual production is even higher. In both Mississippi and Alabama it is estimated that 70% of the catfish produced on farms are sold to processing plants and in Arkansas the figure is lower yet.

| Year | Pounds Sold to Processing Plants | Average Price Per Pound | Total Value to Farmers |
|------|----------------------------------|-------------------------|------------------------|
| 1969 | 3,201,000 | .374 | \$ 1,197,000 |
| 1970 | 5,741,000 | .388 | 1,940,000 |
| 1971 | 11,257,000 | .323 | 3,636,000 |
| 1972 | 18,332,000 | .332 | 6,086,000 |
| 1973 | 19,731,000 | .441 | 8,701,000 |
| 1974 | 16,944,000 | .460 | 7,794,000 |
| 1975 | 16,140,000 | .491 | 7,924,000 |
| 1976 | 18,978,000 | .527 | 10,001,000 |
| 1977 | 22,125,000 | .580 | 12,836,000 |
| 1978 | 30,179,000 | .545 | 16,448,000 |
| 1979 | 40,636,000 | .613 | 24,910,000 |
| 1980 | 46,464,000 | .676 | 31,410,000 |
| 1981 | 60,405,000 | .636 | 38,473,000 |
| 1982 | 99,405,000 | .550 | 54,677,000 |
| 1983 | 137,250,000 | .610 | 83,723,000 |

This increasingly heavy farm-raised catfish production is having definite impacts on the market for wild catfish. On the positive side, the heavy promotional work by the catfish farming industry is developing markets for catfish in areas of the United States where catfish have not been traditionally eaten.

On the negative side, the strong competition from the farm-raised people has pushed wild fish out of the markets in some areas. Farm raised fish have two advantages over wild fish, uniformity of size and availability. Wild fish go through cycles of abundance and scarcity and come in all different sizes. When a restaurant owner puts fish on the menu he is very concerned with being able to get them in a steady supply. Size is also important, he doesn't want to use 4 ounce filets one month and then cut of filets from 10 pound fish the next month.

This means that to compete in the market place, wild fish dealers often have to offer a cheaper price in order to compete. The end result is a poorer price to the fishermen for his catch. The price to the fisherman for catfish indeed has not kept up with the price increase in other Louisiana fish, such as speckled trout and redbfish.

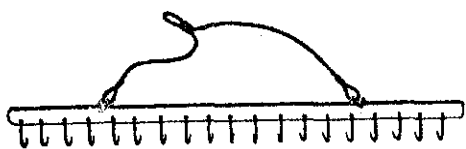
The future for producers of wild catfish is very hard to predict. Will the increased demand for catfish create a special market for wild catfish, which have a different and unique flavor than farm raised fish, or will the increasingly heavy production of farm fish keep cutting into the wild fish market? Only time will tell.

FISHING METHODS OF THE WORLD — HARROWS, RIPPERS, PILKS AND STURGEON LINES

While hooks are used with bait in most fisheries, there are fisheries in some parts of the world which use unbaited hooks to snag fish. In the United States, the use of hooks to purposely snag fish is outlawed in most areas. One of the major exceptions is the use of pilks (jigs) to catch squid.

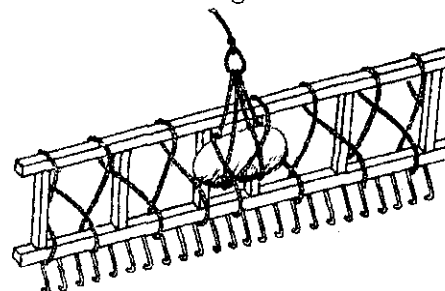
One method of fishing with unbaited hooks is with the use of fish harrows (Figures 1 and 2).

Figure 1



Fluke bar or "Murderer" of Southern England

Figure 2

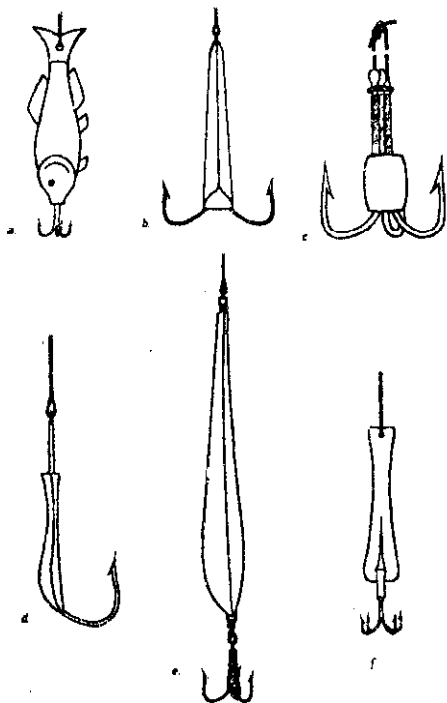


Japanese fish rake.

Fish harrows are simply horizontal bars mounted with many very sharp hooks. When these harrows are towed with a boat the hooks cut into the bottom and snag any fish it passes over. Flat fish, such as flounders are usually the fish caught. The fish harrow shown in Figure 1 was so effective in England that it was called a "murderer". The fish harrow shown in Figure 2 is relatively primitive. The Japanese do however still use harrows, some of them as large as 25 feet across. In the U.S., the only similar device used is called a crow-foot bar. It has barbless hooks hanging from lines off of the bar and is used to snag fresh water clams.

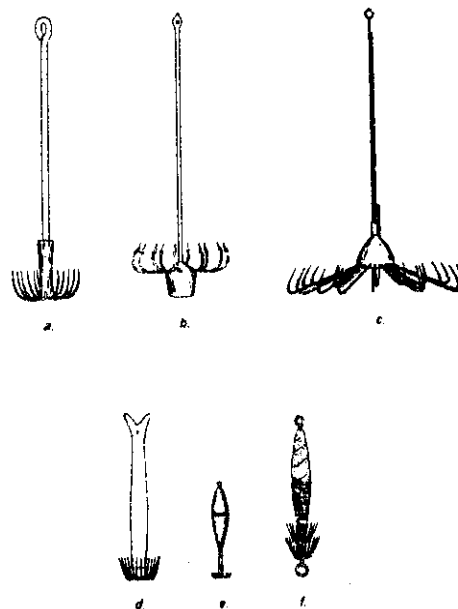
The use of pilks, jigs or rippers is very popular to this day in all parts of the world. Figures 3 and 4 show some of the different types of jigs.

Figure 3



Rippers used in northern lands: (a) Ripper used in fresh-water fishery for perch; (b) anchor-like pilk for cod; (c) pilk made from three hooks and a lead used off Western Greenland; (d) simple Norwegian "juksa" for cod; (e) modern Norwegian "juksa" with movable triple hook; (f) pilk for herring in the Bay of Kiel, Germany.

Figure 4

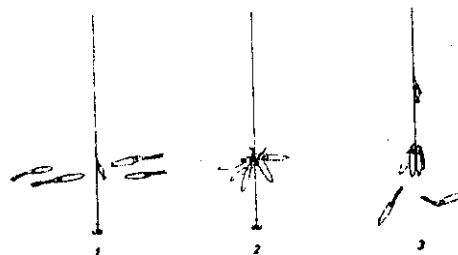


Special hooks for squid: (a) Long-type of Taiwan (Formosa); (b) long-type of Greece; (c) composed hook of Italy; (d) usual Mediterranean type; (e) small type of Portugal; (f) double hook of Korea.

The jigs in Figure 3 are used for catching fish and those in Figure 4 are squid jigs. To be fished effectively, the hooks must be very sharp and the jigs must be moved with short, fast jerks. The fish or squid are attracted to and snagged by the rapid movement of the jig.

Figure 5

Figure 5 shows the squid being attracted to a lure above the hooks and how they are snagged by the movement of the jig.

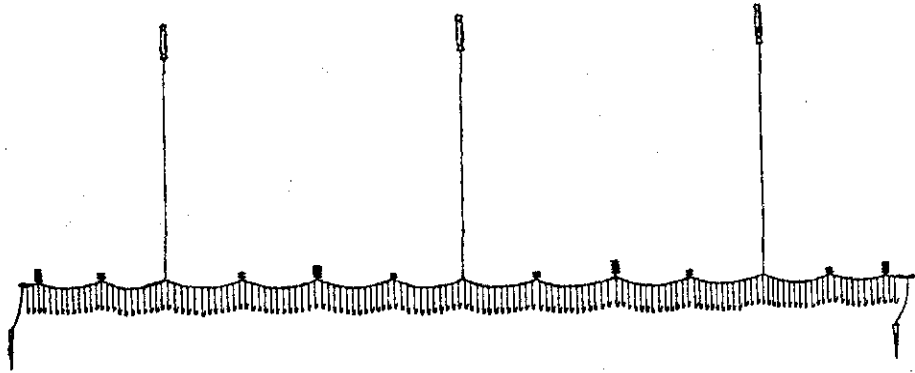


Operation of ripping hooks for catching squid

The use of jigs for ripping fish is most effective in cold weather when fish aren't moving much. The jigging can be done with a simple handline, a short rod or with expensive automatic mechanical jigging machines like those used in squid fishing.

The final method of fishing with unbaited line is with the use of sturgeon lines. (Figures 6 and 7)

Figure 6



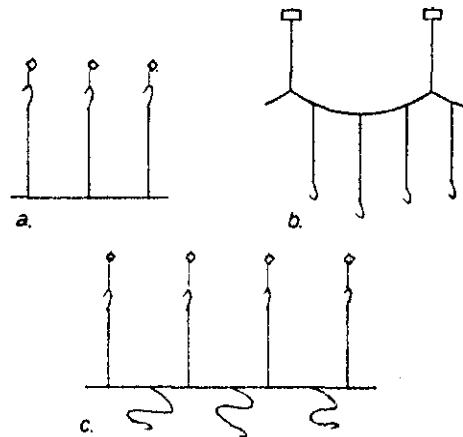
Floating longlines with ripping hooks as formerly used in the Caspian Sea

These lines received their name from the fact that they were very effective in Europe for catching sturgeons. Sturgeons have rough boney plates on their body instead of scales, which snag very easily on the sharp hooks when the fish tries to swim through the line. The more the fish struggles and fights, the more hooks snag the fish. Such lines were used in Louisiana years ago until they were outlawed. In Louisiana they were called snag lines and were used to catch catfish.

Sturgeon hooks are still used in the Black Sea and many parts of Africa.

Source: Fish Catching Methods of the World, A. Brandt.

Figure 7



Different construction of sturgeon line, the branch lines are (a) floating, (b) hanging, or (c) alternately hanging and floating.

THE GUMBO POT

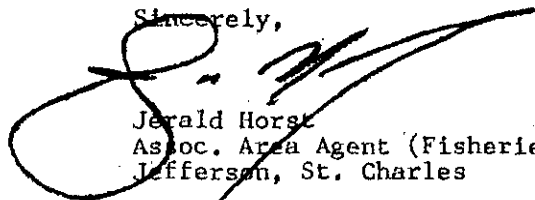
Shrimp Petit Pois

This is a tasty, easy to cook casserole that combine two of my favorites, shrimp and mushrooms. Be sure to thaw the peas or they won't cook through.

- | | |
|----------------------------|---------------------------|
| 1 1/2 lbs. headless shrimp | 1/2 tsp. red pepper |
| 1 lb. fresh mushrooms | 1 qt. milk |
| 1/4 cup melted butter | 1 10 oz. pkg. frozen peas |
| 1/3 cup flour | bread crumbs |
| 1/2 tsp. salt | dash paprika |

Boil and peel shrimp. Wash and slice mushrooms and saute in butter. Make a sauce of the butter, flour, salt, pepper, paprika and milk and blend well. Pour into casserole dish and mix with mushrooms, shrimp and defrosted peas. Cover generously with bread crumbs and bake in 350 degree oven for 10 minutes. Serve with French bread. Serves 4.

Sincerely,



Jerald Horst
 Assoc. Area Agent (Fisheries)
 Jefferson, St. Charles