



Louisiana State University

Agricultural Center

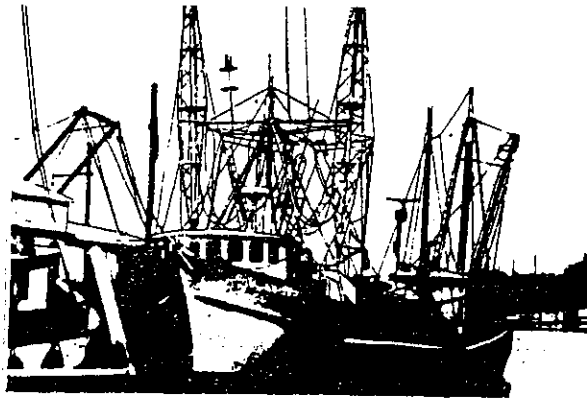
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April 1, 1997
Volume 21, No. 4

SEA GRANT PROGRAM



LAGNIAPPE

LAST CHANCE NOTICE

Those of you that get this newsletter that didn't send in your free subscription renewal from last month's newsletter will be removed from the mailing list beginning in May. We attempt with this newsletter to keep you up to date on fisheries law changes at the federal and state level and also print the latest in fisheries research.

SOCIOLOGISTS LOOK AT TED ISSUE

I don't often do this but I feel that, it is important here to point out that I don't necessarily agree or disagree with the research results in this or any other article which appears in my newsletter. It is my responsibility to report scientific and research results as they are published.

Sociologists are scientists that study people. They are becoming increasingly involved in fisheries management because **people** harvest fish and regulations affect these people.

While TED regulations have been in effect for several years, the subject of TEDs are still a controversial issue to shrimpers. Four university sociologists looked at what happened, why it happened and what is likely to happen.

In 1989, hundreds of shrimp boats blockaded Gulf of Mexico ports in the largest protest over fisheries regulations in the history of the United States. In attempting to explain what happened, the sociologists interviewed shrimpers, environmentalists, federal fisheries officials, scientists, and Sea Grant Extension Agents.

Federal officials, recreationalists and environmentalists repeatedly blamed "...the Louisiana 'bunch' who stirred up other fishermen over TED regulations." Some of their comments were very direct and unflattering. In fact, a Louisiana shrimping representative **was** indeed the only person who would not sign the agreement to use TEDs, which was put forth by the U. S. Department of Commerce TED Remediation Team.

The researchers in this study state that the roots of the resistance to TED use are much broader and deeper. For example, Texas shrimpers immediately tried to remove their name from the TED agreement, saying that the person who signed it had no authorization to do so. Over 95% of the shrimpers interviewed in other states from the Carolinas to Texas viewed TEDs as a threat to their way of life. Other people who signed the agreement stated that they "... signed because they believed they had no choice."

The researchers suggest the Louisiana shrimpers led the charge against TED regulations because there were more of them and they had more at stake. Louisiana does not have tourist-attracting white beaches and clear water. Louisiana's shrimp fleet was twice the size of the combined shrimp fleets of all the other Gulf and South Atlantic states. Louisiana's huge wetlands also produce large amounts of shrimp.

Furthermore, the researchers felt that the TED controversy was only one symptom of the bigger clash between the more "traditional" commercial use of resources with the more "modern" uses of the recreation/tourist/leisure industry.

The conflict has two fronts, land use and fisheries allocation. Coastal property has become more valuable. As people move into the coastal areas, they bring their city mind-set with them. When enough of them move into the coastal fishing communities they often cause political changes that against the wishes of "natives" who rely on "traditional" uses of resources such as commercial fishing.

The second front that the researchers documented was fisheries allocation -- Who gets the fish? According to the study, nearly 70% of shrimpers land other species. They point out that from the viewpoint of commercial fishermen, more and more species are being set aside for recreational fishermen, leaving fewer species for commercial fishermen. From the recreational fishermen's point of view this is a sensible approach to conservation.

The researchers' look into the future was an eye-opener. They predicted that because recreational interests have so much more power than commercial interests, that the end result of the conflict can be predicted.

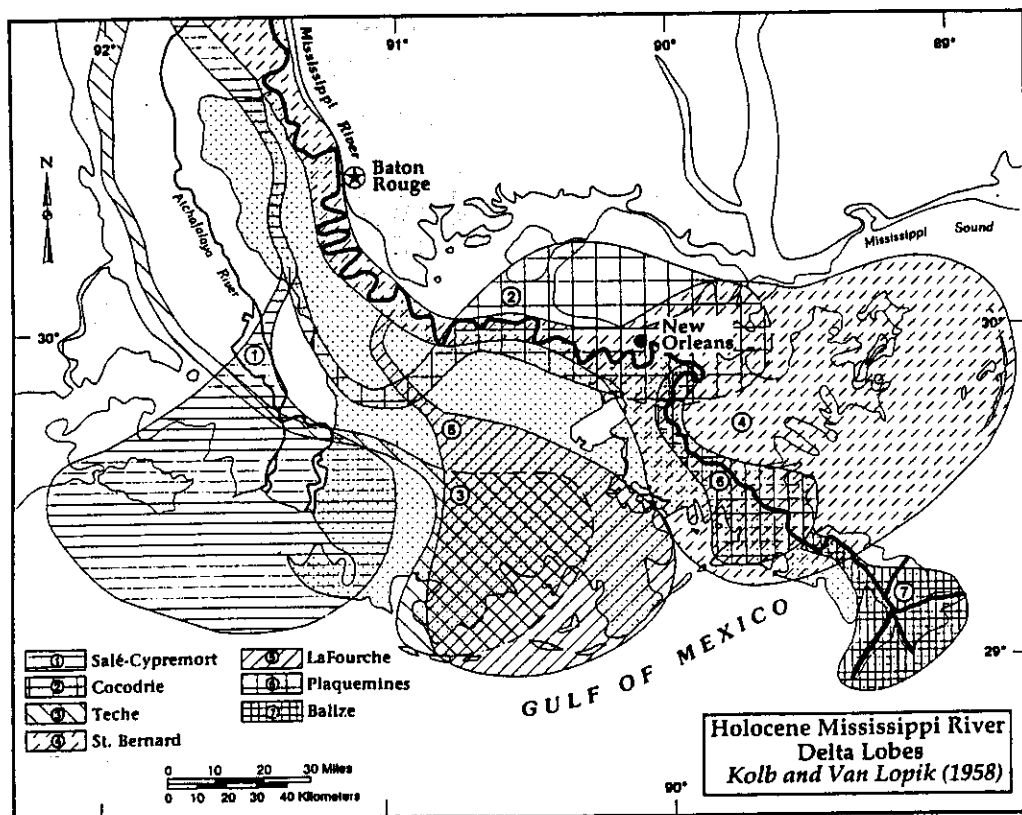
They predicted that America's coasts will change and leave little room for commercial fishermen. Where they survive it will be because their way of life is saved as a living museum. They predicted that here and there on America's coast, small numbers of shrimpers will be encouraged to fish for shrimp, primarily as a tourist attraction.

Source: Shrimpers, Conservationists, and Coastal Development: A Case for Dependency Theory, by A. Margavio, C. Forsyth, S. Laska and J. Mason. In Sociological Spectrum, 14: 1-23. 1994

DELTA

Most people are aware, in a vague way, that somehow, sediments carried by the Mississippi River built the land and marshes of southeast Louisiana. These areas were not built all at one time, but rather by a series of deltas at the mouth of the river beginning thousands of years ago. Deltas are formed where the moving water of the river meets the relatively still waters of the Gulf of Mexico. The moving river water can carry a heavy load of sediments. Still waters can't carry much sediment, so it falls out of the water forming a typically fan-shaped deposit called a delta.

When delta-building reaches a certain stage, the river shifts its channel to a new area and delta-building begins all over again. The old delta then starts to slowly deteriorate because of subsidence (sinking of the land) and natural and human-caused erosion. This is how a series of deltas were formed in different places in southeast Louisiana.



The first delta formed was the Maringouin Delta (not shown on the map above). It found in the area of the present day communities of Livonia, Gross Tete, Maringouin and Rosedale in Iberville Parish. It is now completely buried under deltas formed after it.

The next delta, the Sale-Cypremort Delta (No 1 on the map) was formed in the area of present day Atchafalaya and East and West Cote Blanche Bays. Much of it has disappeared.

The river then formed a crevasse near the present-day city of Plaquemine and flowed to the east forming the Cocodrie Delta. (No 2). This delta lies under the present day city of New Orleans.

The next delta was the Teche (No 3). Modern day Bayou Teche near Morgan City is the old Mississippi River channel. When the Teche Delta matured, the river shifted to the east again, forming the very large St. Bernard Delta (No 4). Much of this delta is still present, but is subsiding and eroding rapidly. The Chandeleur Island are part of the St. Bernard Delta.

The next delta, the Lafourche Delta (No 5) formed Lafourche and much of Terrebonne Parishes. Present day Bayou Lafourche is the old Mississippi River channel.

The river then shifted its primary flow east forming the Plaquemine Delta (No 6). Finally, the present active delta, the Balize (No 7) was formed from one channel of the Plaquemine Delta.

If the present day channel was not controlled by man, most of the Mississippi River would probably have shifted down the Atchafalaya River to the west. As it is, the Atchafalaya is already taking 30% of the flow of the Mississippi River and a new delta is being formed in Atchafalaya Bay.

CRABMEAT IMPORTS

Seafood imports continue to make the news. Shrimp imports from Latin America and Asia compete with Louisiana production. Peeled crawfish meat has come into this country much cheaper than Louisiana can produce. Finfish imports are increasing as commercial production is affected by laws. The importation of crabmeat from South America is not new, but in recent years the amount imported has greatly increased.

Biologists from the Virginia and Maryland Sea Grant Programs traveled to three South American countries to study how their crab industry is developing and how imports are likely to change. The countries they chose were Venezuela, which has a long history of crabmeat exports to the US, Mexico which is currently becoming a bigger exporter and Ecuador which is a small exporter but can become much larger. Their assessment, country-by-country is as follows.

Venezuela has 5 different species of crabs large enough to pick for crabmeat, although most of their production is currently from the same species of blue crabs that we have. Most production is from the Lake Maracaibo region. Catch here is not increasing, and may in fact be decreasing. There are other areas of the country which are suspected of having large crab populations, but they haven't been developed. Most crab fishermen fish wire traps and in many cases, the traps, boats and motors are owned by the processor, not the fishermen. Unless new areas of crab production are developed imports are not expected to increase. Venezuela has exported over \$5 million of crabmeat each year to the U.S. since 1989.

Mexico is becoming a larger exporter of crabmeat and has sent over \$4 million of crabmeat to the U. S. each year since 1990. Mexico has seafood trade connections with the U. S. and is already a major exporter of shrimp and tuna. Mexico has 6 species of crabs large enough to harvest for use, and crabs are fished on both the Gulf and Pacific coasts. Crabs are fished both with traps and drop nets. The report predicts that Mexican exports will increase as new areas are fished, roads are improved, and crab processing technology improves.

Ecuador is on the Pacific coast of South American and is well-known for its large production of farm-raised shrimp. A study funded by the U. S. Agency for International Development found that the country had enough crabs for a fishery. Ecuador has 2 species of crabs large enough to fish. In Ecuador, very little fishing has occurred for these crabs for use within the country. The local people, by far, prefer to eat mangrove crabs, a crab that lives in burrows and is totally unlike our crab. A big problem is the strong tides and currents which make fishing crab traps very difficult. Most fishing is with drop nets. Baby crabs often are pumped into shrimp farming ponds and are seen as a pest. This has however raised interest in the possibility of crab farming in the area. Exports of crabmeat to the U. S. were very small until 1992, when they reached \$796 thousand. The report stated that Ecuador could continue to increase its crab industry.

Overall, the biologists predicted that crab meat imports from Central and South America will continue to increase. In addition to the 3 countries above, Costa Rica, Columbia, and Chile are exporting crabmeat, and Brazil, Uruguay and other countries are developing crab fisheries. The North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT) will probably result in more crabmeat imports into the U. S.

Source: The Crab Industry in Venezuela, Ecuador and Mexico. Implications for the Chesapeake Bay Blue Crab Industry, by M. Oesterling and C. Petrocci. Virginia Sea Grant Marine Advisory Program and Maryland Sea Grant Extension Program. 1995.

LOUISIANA'S ARTIFICIAL REEF PROGRAM

Louisiana's artificial reef development program is alive and well. The program is based around the sinking of old offshore oil and gas platforms in designated areas of the Gulf of Mexico to improve fishing. Since the first rig was put in place in October, 1987, a total of 64 platforms have been put in place. Results show that a typical platform has around 20,000 fish around it, which is 10 times the number of fish found only 100 yards away.

Most artificial reefs are marked by yellow buoys with internal radar reflectors. **It is important that fishermen should not tie off to these buoys.** Tying off to the buoys will result in their loss or damage.

A simple grappling hook anchor can be made of 3/8" concrete rebar. It will hold most boats in position, but can be straightened with a strong pull on the anchor line.

Listed below are locations by block, latitude and longitude, the date the platform was sunk, and the water depth.

AREA	BLOCK	DATE	DEPTH	LAT	LONG
EAST CAMERON	272.000	10/18/92	180	282503	923757
EAST CAMERON	273.000	07/07/93	180	282533	923956
EAST CAMERON	273.000	07/09/93	180	282527	923956
EAST CAMERON	273.000	09/04/93	178	282550	923931
EAST CAMERON	273.000	09/04/93	178	282550	923930
EAST CAMERON	272.000	05/13/94	180	282508	923800
EAST CAMERON	272.000	05/16/94	180	282500	923802
EAST CAMERON	273.000	10/05/94	168	282548	924000
EAST CAMERON	273.000	09/20/95	173	282527	923931
EUGENE ISLAND	366.000	07/18/92	345	280714	912450
EUGENE ISLAND	366.000	09/23/92	345	280727	912508
EUGENE ISLAND	366.000	09/20/95	345	280719	912501
SOUTH MARSH ISLAND	146.000	10/30/87	238	281308	915846
SOUTH MARSH ISLAND	146.000	08/25/90	238	281307	915836
SOUTH MARSH ISLAND	146.000	07/27/95	238	281308	915828
SHIP SHOAL	320.000	07/15/90	335	280837	911932
SHIP SHOAL	320.000	07/19/91	335	280813	911914
SHIP SHOAL	230.000	10/13/92	120	282827	910214
SHIP SHOAL	214.000	10/13/93	108	283012	905148
SHIP SHOAL	214.000	10/13/93	108	283026	905131
SHIP SHOAL	214.000	10/13/93	108	283012	905145
SHIP SHOAL	215.000	11/29/93	107	283024	905409
SHIP SHOAL	230.000	10/15/93	120	282830	910210
SHIP SHOAL	230.000	09/07/94	120	282831	910213
SHIP SHOAL	320.000	09/28/94	335	280839	911955
SOUTH TIMBALIER	128.000	09/27/88	103	284014	901549
SOUTH TIMBALIER	128.000	08/22/90	103	284014	901548
SOUTH TIMBALIER	86.000	09/20/91	91	284644	901402
SOUTH TIMBALIER	128.000	09/07/94	106	284012	901550
SOUTH TIMBALIER	130.131	05/12/94	140	284116	900912
SOUTH TIMBALIER	134.000	09/06/94	138	283759	901355
SOUTH TIMBALIER	134.000	09/06/94	138	283800	901354
SOUTH TIMBALIER	135.000	09/05/94	120	283812	901601

SOUTH TIMBALIER	151.152	05/12/94	140	283700	901522
SOUTH TIMBALIER	151.152	05/12/94	143	283708	901433
SOUTH TIMBALIER	128.000	09/19/95	103	284027	901539
WEST CAMERON	616.617	11/20/88	300	280250	931900
WEST CAMERON	616.617	12/15/88	308	280301	931900
WEST CAMERON	616.617	12/29/88	310	280259	931823
WEST CAMERON	616.617	08/01/90	310	280255	931852
WEST CAMERON	616.617	07/21/91	300	280327	931842
WEST CAMERON	595.000	11/15/91	245	280854	931730
WEST CAMERON	595.000	05/15/92	240	280901	931731
WEST CAMERON	595.000	05/16/92	240	280904	931732
WEST CAMERON	616.617	06/29/92	305	280313	931820
WEST CAMERON	608.000	10/16/92	260	280630	931831
WEST CAMERON	608.000	02/05/93	260	280622	931829
WEST CAMERON	616.617	07/15/93	305	280328	931904
WEST CAMERON	586.000	10/23/94	230	281011	931647
WEST CAMERON	608.000	08/06/94	260	280617	931830
WEST CAMERON	608.000	11/22/94	260	280638	931801
WEST CAMERON	608.000	08/20/96	255	280628	931803
WEST CAMERON	608.000	11/11/96	260	280606	931832
WEST DELTA	134.000	01/21/92	280	284354	894418
WEST DELTA	134.000	01/21/92	280	284404	894405
WEST DELTA	134.000	06/04/92	275	284420	894410
WEST DELTA	134.000	04/17/93	280	284413	894420
WEST DELTA	89.000	08/17/93	196	285538	893659
WEST DELTA	89.000	09/04/94	196	285551	893715
WEST DELTA	95.000	05/27/95	153	285431	894829
WEST DELTA	95.000	05/27/95	153	285435	894830
WEST DELTA	69.000	09/29/96	137	285708	895007
WEST DELTA	76.000	09/20/96	181	285655	893740

ENFORCEMENT AGENTS ACTIVE

While reviewing the February, 1997 Louisiana Department of Wildlife and Fisheries Enforcement Report, I was amazed by how active they were. What follows is a listing of what agents confiscated while detecting illegal activities: 28 firearms, 4 spotlights, 1 boat motor and trailer, 2 outboard motors, 2 boats, 1 pocket knife, 1 boat registration application, 3 fishing/hunting licenses, 1 bag of marijuana, 10 rabbit traps, 2 catfish graders, 4 gill nets of unspecified length and 1423 yards of gill net, 2 hoop nets, 23 rabbits, 6 squirrels, 5 deer, 138 nutria, 11 ducks, 10 coots, 2 blue herons, 19 robins, 3 skinned birds, 1 whole unidentified bird, 1 alligator, 82 individual catfish and 1271 lbs of catfish, 16 bowfin (choupique), 134 crappie (sac-au-lait), 30 garfish, 8 bass, 8,185 lbs of red snappers, 12 lbs of lane snapper, 164 lbs of vermilion snapper (b-liner), 16 lbs of creola, 30 lbs of amberjack, 111 lbs of cobia, 53 tuna plus 649 lbs of tuna, 18 red drum, 40 lbs of croaker, 228 lbs of white trout, 189 lbs of white snapper, 1506 lbs of sheepshead, 10 black drum plus 540 lbs of black drum, 2 speckled trout, 62 lbs of hake, 150 ½ sacks of oysters, 2 gallons of shucked oysters, 12 plastic bags of cleaned crabs, 2½ sacks of crawfish and one 4-gal bucket of crawfish.

Remember that February is the shortest month of the year and probably one of the slowest for fishing and hunting activities.

Source: Department of Wildlife and Fisheries Enforcement Report. February, 1997.

USED OIL POLLUTION

Motor oil, metal working oils, heat transfer fluids, and auto transmission and brake fluids are all considered used oil. It's important to recycle used oil because it contains heavy metals and other contaminants that can be toxic to people, wildlife, fish, shellfish, and plants. Larval shrimp, crabs, and finfish are especially at risk when used oil contaminants enter the marine food web. Throwing away used oil also eliminates a potential source of energy, as it can be refined into lubricating oil or blended as a fuel without harming the environment.

Over two million Louisianians are do-it-yourselfers who maintain their own vehicles, but they recycle only 4 to 15 percent of the used oil they generate. The rest, about 5 million gallons, is thrown into the environment, through landfills, sewers, waterways, and vacant lots. The coastal fishing fleet alone uses 250,000 gallons of oil year.

Collection centers for used oil have been established in many areas, at automotive shops, marinas, seafood and fuel docks, and landfills. Some large companies have also set up used oil recycling programs for their employees. Check to see if your community has a collection program and use it whenever you change the oil in your car or boat engine.

Call my office if you want to receive a fact sheet containing more information on recycling used oil.

COMMERCIAL SALTWATER FINFISH LICENSES

On March 1, Act 1316 (the gill net law) took full effect. After this date, the use of gill nets as strike nets in the saltwater area of the state will be limited to two seasons for only two species of fish. Pompano strike netting will be allowed in Breton and Chandeleur Sounds between August 1 and October 31, and mullet strike netting will be allowed between the third Monday in October and the third Monday in January each year. Strike nets cannot be used to harvest speckled trout, black drum, sheepshead or any other fish in the saltwater area of state waters.

I have received many questions about how this will change fish supplies. This is impossible to predict, although a look at past and present commercial finfish licenses may offer some clues.

Act 1316 was passed by the Louisiana Legislature in 1995. Before its passage, the state issued 1144 saltwater gill net licenses. Nonresidents accounted for 127 of them and

were used mostly for mullet fishing. The remaining 1017 resident licenses were used for mullet as well as food fish such as trout, drum, sheepshead and flounder.

Under Act 1316, a total of 595 mullet permits, 186 speckled trout permits, 149 restricted species permits, and 16 pompano permits were issued in 1995. In most cases, one person held multiple permits so they could fish in various fisheries.

After March 1, the restricted species permit (for drum, sheepshead, etc.), and the speckled trout permit will no longer be issued, so other sources of gear will have to produce the fish needed for restaurants. Chief among these is the commercial rod and reel license.

In 1996, about 600 people were eligible for this license, but only 26 people bought one. As of March 25 of this year, only 18 were purchased. Act 1316 requires that in order to be able to purchase the rod and reel license, that person must prove that they have held a gill net license, earn 50% or more of their current income from commercial fishing of some sort, and have never had a class 3 or greater fisheries violation.

State courts have issued an **opinion** that the requirement for a prior gill net license is unconstitutional. However, since this is not a **written ruling**, the Department of Wildlife and Fisheries is still following the specifications of the act.

Other licenses which may be used to harvest saltwater fish commercially are the commercial spear gun (26 issued in 1996), and the commercial flounder gig (14 issued). Hoop nets and setline/trotlines are primarily used for freshwater fish, but are also legal in saltwater.

Finally, shrimp trawlers may also sell commercial fish (except speckled trout and mullet) that they catch in their trawls. Speckled trout, which are rarely caught in any number in trawls anyway, may only be harvested legally by commercial rod and reel, and mullet may only be commercially harvested with a strike net.

FEDS GETTING INTO HABITAT

Fisheries located in the zone between state waters and the 200 mile line offshore have been managed under the Magnuson Act. Periodically, this act comes up before the U. S. Congress to be reauthorized. During the latest reauthorization, an amendment was added that may give the Gulf of Mexico Fishery Management Council and the National Marine Fisheries Service (NMFS) much broader powers and may actually give them some authority in state waters.

This amendment directs each fishery council to describe and identify "essential fish habitat" for federally managed fisheries, identify impacts (including fishing gear) that harm this habitat, and identify actions to conserve and improve this habitat. This may impact states in three ways:

- 1) Many species harvested in federal waters (such as shrimp) spend much of their early life in state waters. This may directly involve NMFS in Louisiana's coastal restoration programs which modify habitat.
- 2) The Mississippi River's discharge has an effect on federal fisheries. The hypoxic zone (dead zone) in the Gulf of Mexico **may** be an example. States far into the interior of the North American continent contribute run-off into the river and therefore may affect federal water fisheries.
- 3) Even if a species isn't fished for directly, but only is a prey (food) species for fish that are fished for, their habitat is included. Many of these species spend part of their early and sensitive life histories in state waters.

INFORMATION AVAILABLE ON MERCURY IN FISH

Recently, mercury contamination in fish has been in the news. While the problem in Louisiana is not as severe as in many other states, we do have some fish consumption advisories in place.

Mercury is a heavy metal that occurs naturally in small concentrations in most waters. Problems arise when mercury released by human activities elevates the natural levels. In high concentrations it may affect human health. Pregnant women and young children are considered most at risk.

In Louisiana, the Department of Environmental Quality is conducting extensive testing of many species of fish from water bodies throughout the state. When concentrations above the alert level are found, the Louisiana Department of Health and Hospitals (DHH) releases consumption advisories to the public.

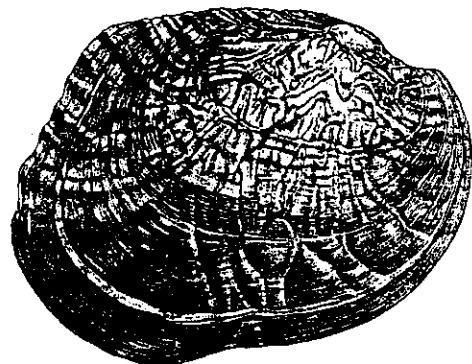
DHH has now put all of the current advisories in a condensed, easy-to-read form. They list the water bodies in question, the species of fish concerned, and their advise on how many meals of these fish can be safely eaten per month.

Currently 17 water bodies have some form of advisory on mercury or other contaminant. All but one of them are for freshwater areas.

The public may obtain a free copy of this publication by calling (504) 568-8537 in New Orleans and requesting "Louisiana Fish Consumption Advisories: A Guide for Eating Sport Fish in Louisiana."

BOTTOM FALLS OUT OF MUSSEL MARKET

Less than two years after the development of Louisiana's freshwater mussel (clam) fishery, market demand for shells has seriously declined. Beads are cut from the shells of these mussels to make "seeds" that are inserted into pearl oysters in Japan. After several years, the



pearl oyster lays several layers of pearl nacre on the bead to produce a cultured pearl.

Louisiana opened its first season on these mussels in 1995 with 626,269 pounds of shell being produced worth \$1,241,294. In 1996, only 91,962 pounds worth \$90,179 were produced during the May through September season. According to Dave Arnoldi with the Department of Wildlife and Fisheries Inland Fish Division, the same thing occurred in Tennessee, the nation's leading mussel shell producer. Tennessee's 1995 freshwater mussel harvest was worth \$14.7 million.

Shell buyers are blaming diseases on pearl oyster beds in Japan, cheap Chinese pearl production and changes in jewelry fashions. Poor market conditions are expected to last through 1997 and possibly into 1998.

BOATERS AND OYSTERS

Earlier this year, important oyster producing areas were closed because of the occurrence of a virus called the Norwalk virus. More than 400 people in 5 states became sick from eating Louisiana oysters. Eight oyster beds were temporarily closed and serious damage was caused to the state's million dollar a year fishery. This has happened before. These events occurred in areas away from the influence of discharges from the cities and towns of the state, and could only have come from recreational and commercial boaters. In 1996, 304,798 recreational and 16,143 commercial boats were registered in Louisiana.

Many boat operators are dedicated to keeping Louisiana waters clean. However, there are others that recklessly dump their sewage overboard. The dumping of raw sewage is illegal. Since every boat can't be watched, voluntary compliance is important.

The Louisiana Department of Wildlife and Fisheries suggests ways we can keep our waters clean. Use shoreside rest rooms before going out on the water. Avoid discharging bilge water. Don't throw anything overboard. Dispose of waste from portable toilets or holding tanks properly. Some marinas now have sewage pump-out or dump stations. For a list of these call the department at (504) 765-2708 in Baton Rouge.

Remember that if you "get a hold of a bad one" (oyster that is) you probably have your boating neighbor to blame.

COASTAL WETLANDS WORKSHOP

The Coalition to Restore Coastal Louisiana will be holding its Annual Louisiana Coastal Wetlands Workshop in Lafitte on June 7. The workshop includes a tour to see first-hand the wetlands of the Barataria Basin and the many restoration projects accessible only by boat.

Guest speakers will discuss problems and solutions to restore wetlands and the effects of restoration projects on fisheries, plants and water quality. A visit to the Jean

Lafitte National Park & Preserve, and a crawfish boil and reception at the Victoria Inn are included.

Cost of registration is \$45 and includes two meals. For registration information, a detailed brochure, or questions, call 1-888-522-6278. A similar program will be held in Cameron, Louisiana on May 3.

Additional sponsors include the Jefferson Parish Environmental Department, Barataria-Terrebonne National Estuary Program, Jean Lafitte National Historical Park and Preserve, Jean Lafitte Tourist Commission, Louisiana Cooperative Extension Service, Louisiana Department of Wildlife and Fisheries, and the Louisiana Department of Natural Resources Coastal Restoration Division.

PROPOSED CHANGES FOR REEF FISH REGS

The Gulf of Mexico Fishery Management Council's Reef Fish Plan is easily their most amended plan. Now more changes are being proposed. They are as follows:

- 1) Create 3 classes of commercial licenses for red snapper landings with the following qualifications.

License Class	1990-1992 Landings in 2 out of 3 years	Initial Trip Limit
1	More than 10,000 lbs.	2,000 lbs.
2	5,000 but less than 10,000 lbs.	1,000 lbs.
3	2,500 but less than 5,000 lbs.	500 lbs.

- 2) Create a monthly commercial season that would open the first 15 days of each month until the commercial quota is taken.
- 3) Create provisions for the transfer of permits, the length of the limited entry system and appeals.
- 4) Limit the possession of reef fish taken from traps to fish taken from permitted fish traps, and from stone crab and spiny lobster traps.
- 5) Increases the minimum size for vermilion snapper (b-liner) from 8 inches to 10 inches, recreationally and commercially.
- 6) Removes sea bass, porgies and grunts from the Reef Fish Plan, allowing the states to manage them.
- 7) Limits the recently created 20-fish recreational aggregate bag limit for reef fish species without bag limits to vermilion snapper, lane snapper, banded rudderfish, lesser amberjack, almaco jack, gray triggerfish, and tilefish.

The nearest public hearing on the amendment creating these changes will be at 7:00 p.m. on Monday, April 21, at the Larose Regional Park, 2001 East 5th Street in Larose.

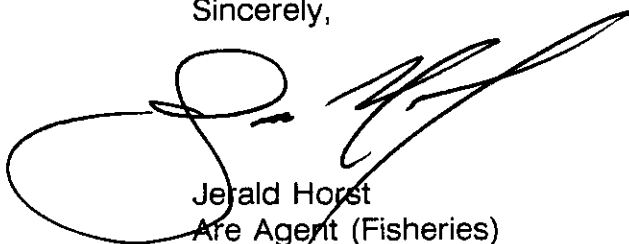
THE GUMBO POT Shrimp Curry

This is an authentic curry. Notice the use of cumin, coriander and turmeric instead of curry powder. You may adjust the rates of the three to get the taste you want. In south Louisiana we have a taste for coriander. It is one of the prominent ingredients in bags of crab boil. If you can't find ground coriander, you may use the whole herb, just break up into smaller particles. I think you will like this recipe.

- | | |
|---|-------------------------------------|
| ¼ cup vegetable oil | 1 tsp ground turmeric |
| 1 medium onion, sliced thin | ½ tsp salt, plus more to taste |
| 1 chunk (1½ inches) fresh gingerroot
peeled and pureed | ½ cup plain yogurt |
| 4 large garlic cloves, pureed | 1 cup chopped fresh cilantro leaves |
| 1½ lbs peeled shrimp | 1 jalapeno pepper, cut in half |
| 2 tsp ground cumin | 1½ cups thawed fresh green peas |
| 2 tsp ground coriander | 2 tsp chopped fresh cilantro leaves |

Heat oil in a large deep skillet or a black iron pot, over a medium-high heat until hot, but not smoking. Add onions and saute until completely softened. Stir in ginger, garlic, ground spices, ½ tsp salt and yogurt. Stir almost constantly until liquid evaporates, oil separates and turns orange, and you can smell the spices frying. Stir in one cup cilantro, add 2 cups of water, jalepeno pepper and bring to a simmer. Reduce heat, cover and simmer for 20 minutes. Add remaining cilantro, peas and shrimp. Salt to taste. Cook uncovered until shrimp are done. If too watery, add a little cornstarch and heat until thickened. Serve over rice. Serves 4.

Sincerely,



Jerald Horst
Are Agent (Fisheries)
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