

Lagniappe



EXTENSION PROGRAMS
Agriculture and Forestry
Community Leadership
Economic Development
Environmental Sciences
Family and Consumer Sciences
4-H Youth Development
Natural Resources

November 1, 2001

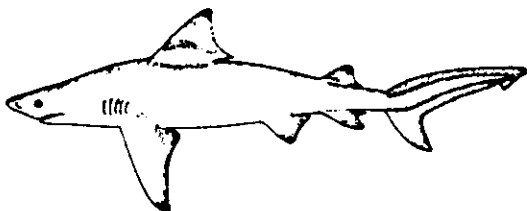
Volume 25, No. 11

EXTENSION FISHERIES OFFICE MOVED

The location of the LSU AgCenter/Sea Grant office for marine advisor Mark Schexnayder and fisheries specialist Jerald Horst has been moved from Marrero to 6640 Riverside Dr., Suite 200, Metairie, LA 70003. The telephone number is 838-1170. Schexnayder is the marine advisor for the parishes of Jefferson, St. Charles and St. John and shares duties in Orleans Parish with marine advisor Rusty Gaude.

THUG

Now that the shark attack hysteria has died down, it's a good time to look at the main shark species involved in the human attacks the last two summers in the Southeast, the bull shark. This species, scientifically known as *Carcharhinus leucas*, is found worldwide in warm seas.



It is also the third most common species involved in attacks on humans worldwide, behind only the great white and tiger sharks. It is not nearly as well known as the huge two-toned, torpedo shaped great white shark or the attractively striped tiger shark, with its graceful arched tail fin. With its dull gray color, stubby body shape and blunt nose, it resembles — well, a thug. Adding to its image is its reputation for aggressiveness and its preference for low-salinity, murky estuarine waters.

Not only do bull sharks prefer low salinity waters, they can in fact, thrive in completely fresh water. They have been found as far up the Mississippi River as St. Louis, Missouri. They have been found 2000 miles up the Amazon River and in freshwater Lake Nicaragua, where they are recognized as dangerous sharks, both in the lake and in the river connecting it to the sea.

While the bull shark is not a well-researched shark, it is known that large females seek out low-salinity estuaries and river mouths to bear their one to ten living young, typically between April and June. The pups measure 29 inches at birth and are born fully



armed with teeth. They stay in low-salinity waters about 6 years, feeding and growing until 4 to 5 feet in length. Bull sharks will grow to 11 feet long and live at least 20 years. They eat almost any type of fish or shellfish, but seem to prefer rays, including stingrays, and other sharks. Fishermen have found that one of the best baits for bull sharks is fresh shark flesh.

A Texas A&M University researcher has identified Sabine Pass, between Calcasieu Parish, Louisiana and Jefferson County, Texas as a nursery area used by hundreds of female bull sharks to give birth each year. However, most of Louisiana's coastal waters are believed to serve the same purpose. Bull sharks are so common in Louisiana estuaries that almost any shark without black tips on its fins that is caught inshore, is likely to be a bull shark. Often these are called "sand sharks", a catchall term for any small shark. Worldwide, over 350 species of sharks exist; not one of them is a species called a sand shark.

PROGRAM EVALUATION REPORT

Several months ago our readers were asked to complete a survey evaluating the LSU AgCenter/Sea Grant Program. A sincere THANK YOU is extended to those of you that took the time to complete the questionnaire. The survey results are below.

Readers were asked to rate the importance of types of information provided by LSU AgCenter/Sea Grant.

	High %	Medium %	Low %
New fisheries laws, regulations and policies	91	8	1
Fisheries biology	77	22	1
Fisheries management methods	72	25	3
Ocean and wetlands health	62	35	3
Safety	58	32	10
Seafood safety and nutrition	46	46	8
Vessels, gear & equipment	39	48	13
Fisheries business management	30	49	21
Seafood markets and marketing	25	47	28

Readers were next asked to rate the importance and accuracy of the following sources of information. Twelve percent gave no evaluation for the Internet, and four

percent each gave no ratings for the National Marine Fisheries Service or Other fishermen/businesses.

	High %	Medium %	Low %
LSU AgCenter/Sea Grant	92	7	1
Louisiana Dept. of Wildlife and Fisheries	69	25	6
National Marine Fisheries Service	44	34	18
Other fishermen or fisheries businesses	27	44	25
Newspapers and magazines	23	54	23
Internet	20	34	33
Television and radio	15	34	51

Readers were also asked for additional comments and topics of interest that they would like to see LSU AgCenter/Sea Grant cover. Twenty-three percent of the respondents did not provide additional suggestions or comments, and 24% asked that we keep our topic mix as it is now. The other responses are below.

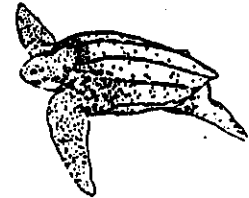
The most suggested topic, with 18 suggestions, were grouped together around coastal erosion and restoration, wetlands research, and freshwater diversions. Nine people requested even more coverage of fisheries rules and regulations, five wanted more information on fisheries management methods, including individual fishing quotas (IFQs), three wanted more aquaculture information, and two each wanted listings/maps of fishing hot spots and an analysis of the functions of National Marine Fisheries Service.

Topics suggested by one person each included, fisheries business development information, fishing line biodegradability, retail seafood market management, derelict vessels, effects of bowfishing, understanding tides, eco-tourism, boating safety and courtesy, seafood safety and nutrition, listings of fisheries seminars/meetings/workshops, a listing of available LSU AgCenter/Sea Grant publications, marine protected areas, marine birds, porpoise biology, changing environmental conditions, spotted jellyfish, seafood prices, sport/commercial conflict, endangered marine species, information and requirements for new boat owners, GPS use, removing hooks from people, the legality of selling speckled trout and redfish in stores and restaurants, habitat enhancement, encouraging in-state seafood processing, stress level studies of commercial fishing, pollution, and articles about the Louisiana Department of Wildlife and Fisheries.

Quite a few people asked for more articles on the biology of specific species. Blue crabs led the list with 7 requests, followed by speckled trout (3), redfish (3), shrimp (2), and bass (2). One person each requested more biological information on mullets, yellowfin tuna, billfish, garfish, freshwater catfish, buffalofish, crawfish, and oysters. Two people requested more information on freshwater fish in general.

TED RULES CHANGES PROPOSED

Citing the need to protect large mature loggerhead, green and leatherback sea turtles, the National Marine Fisheries Service (NMFS) is proposing six rule changes for the use of turtle excluder devices (TEDs). According to NMFS, of the dead stranded sea turtles that they have measured, 47% of the loggerhead and almost 7% of the green sea turtles were too large to escape from current TEDs. Leatherback sea turtles grow even larger than loggerhead and green sea turtles. The proposed changes are as follows:



- Under current rules, the TED opening is required to be 32 inches long by 10 inches high. NMFS is proposing that shrimpers must use either a 71-inch opening with a single cover flap or a 56-inch opening with a double cover flap. NMFS estimates that the 71-inch opening will result in a 1 to 3% increase in shrimp loss, which they say is not statistically different than zero. NMFS believes that 71-inch openings with long flaps may also benefit shrimpers by excluding debris better.
- An increase in the size of the TED grid from 28 to 32 inches is proposed. NMFS believes that the majority of shrimpers already use TED grids of this size.
- Prohibiting the use of accelerator funnels in TEDs is proposed. NMFS says that the 71-inch opening on the accelerator funnel required to release large turtles would be too large to accelerate water through the grid and that the end of the funnel would come out of the opening, which would increase shrimp loss.
- The use of hooped hard TEDs, weedless TEDs and Jones TEDs would be outlawed. Hooped hard TEDs cannot be built large enough to exclude large turtles. NMFS states that the grid bars on weedless and Jones TEDs do not hold up under commercial use and bend backwards. They have proposed that the deflector bars must be securely attached/welded to the top and bottom of the TED frame or to a horizontal deflector bar, as in the case of the flounder TED. NMFS states that the Jones TED is not currently in use and that weedless TEDs are mostly used in Texas, where 15% of the shrimpers use them.
- Requiring bait shrimpers to use TEDs in their trawls in states that allow licensed bait shrimpers to also fish for shrimp for sale as food from the same vessel is being proposed.
- Requiring 55 minute tow times for trawl nets 12 feet and smaller is also proposed.

Under the proposal, all changes approved would go into effect one year after the final rule is published. Only one public hearing is scheduled for Louisiana, at 7 p.m.

on Monday, November 5, at the Airport Hilton Hotel, 901 Airline Dr. in Kenner. Written public comment may also be sent to Chief, Endangered Species Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Silver Spring, MD 20910.

LOUISIANA'S RECREATIONAL FISHERY

The year 2000 edition of *Fisheries of the United States* was released by the National Marine Fisheries Service in September. The section on U.S. marine recreational fishery, and Louisiana's place in the fishery, was quite interesting. Data for the report was collected by the Marine Recreational Fishery Statistics Survey (MRFSS) Program. Our neighboring state of Texas does not participate in MRFSS, preferring to do independent sampling, therefore Texas does not appear in the tables below.

RECREATIONAL PARTICIPATION

Out-of-State Anglers (thousands)		In-State Anglers (thousands)		Trips (thousands)	
Florida	2,858	Florida	2,970	Florida	25,789
North Carolina	1,204	California	1,485	New Jersey	6,277
Maryland	465	North Carolina	608	North Carolina	6,091
New Jersey	417	LOUISIANA	597	California	5,949
Massachusetts	258	Massachusetts	561	Massachusetts	4,450
Virginia	254	New Jersey	544	New York	4,444
South Carolina	236	Maryland	498	Maryland	3,722
California	220	New York	460	LOUISIANA	3,654
Delaware	190	Washington	450	Virginia	3,286
Rhode Island	172	Virginia	441	Washington	1,672
Maine	143	Oregon	285	Connecticut	1,434
Alabama	122	South Carolina	248	Rhode Island	1,280
LOUISIANA	102	Alabama	224	South Carolina	1,277
New Hampshire	82	Connecticut	221	Alabama	1,097
Oregon	80	Mississippi	180	Mississippi	1,061
Connecticut	50	Georgia	168	Delaware	1,038
Washington	47	Maine	151	Oregon	901
Georgia	43	Rhode Island	104	Maine	851
Mississippi	43	New Hampshire	84	Georgia	765
New York	19	Delaware	78	New Hampshire	358
		Total	10,344	Total	75,348

Not surprisingly, Florida leads in every category by a wide margin. Louisiana trails only Florida, California and North Carolina in the number of in-state anglers. All three states have more people than Louisiana. Louisiana does a much poorer job of attracting out-of-state anglers, ranking a weak thirteenth of the 20 coastal states, excluding Texas, which would also certainly rank above us if they were included. Louisiana is fourth from the bottom in the ratio of out-of-state anglers to in-state anglers. In spite of the growth in Louisiana's charter fishing fleet, the state has not done well at tapping into the tourist dollar.

Where Louisiana does fare well is in catch, as the table below illustrates. In pounds harvested, Louisiana ranks second only behind Florida, which doubles Louisiana's harvest. However, Florida has nearly 5 times as many in-state fishermen and 28 times as many out-of-state anglers as Louisiana. Where Louisiana really shines is in the number of fish harvested per trip, at 4.7 fish per trip. Only New York is near Louisiana, with 4.4 fish per trip. Connecticut ranks third with 3.8 fish per trip and everyone else is at 3.0 or less. The Florida average is 1.9, which is below the national average of 2.5.

RECREATIONAL HARVEST

Pounds Harvested (thousands)		Number Harvested (thousands)		Number Released (thousands)	
Florida	64,207	Florida	69,508	Florida	80,691
LOUISIANA	31,197	New York	19,552	New Jersey	24,673
New Jersey	23,892	LOUISIANA	17,074	LOUISIANA	22,142
California	22,217	New Jersey	11,139	Maryland	21,380
North Carolina	21,505	California	10,158	Virginia	17,025
New York	16,329	Virginia	8,734	North Carolina	13,722
Massachusetts	14,949	North Carolina	8,455	New York	13,259
Virginia	12,734	Maryland	7,632	Massachusetts	11,749
Maryland	8,589	Massachusetts	5,634	California	10,080
Rhode Island	6,548	Connecticut	5,410	Alabama	4,181
Alabama	5,895	Alabama	3,290	Connecticut	4,158
Oregon	5,290	Washington	2,979	Delaware	4,054
Washington	4,558	Rhode Island	2,886	South Carolina	3,547
Delaware	3,332	Mississippi	2,534	Rhode Island	3,525
Connecticut	2,878	South Carolina	1,852	Georgia	3,120
Mississippi	2,744	Georgia	1,852	Mississippi	2,376
South Carolina	2,712	Oregon	1,699	Washington	2,344
Georgia	2,114	Delaware	1,689	Maine	1,455
Maine	1,494	Maine	1,581	New Hampshire	912
New Hampshire	1,041	New Hampshire	882	Oregon	500
Total	254,223	Total	184,540	Total	244,879

GET IT FROM THE RADIO

On the water, many things are uncertain. One thing that is certain however, is that fishermen, especially commercial fishermen, monitor the local NOAA weather radio channel. Recognizing this, and the fact that short-notice fisheries season changes can result in fishermen unintentionally violating the law, Lafitte shrimper William "Gene" Adam developed an idea.

His idea was that NOAA weather radio channels could broadcast notices of season changes and other fisheries information between their weather bulletins. Adam took the idea to the Jefferson Parish Marine Fisheries Advisory Board, of which he was a member. The board, which is the advisory committee to Adam's local LSU AgCenter/Sea Grant agent approved the concept and asked agent to pursue the idea.

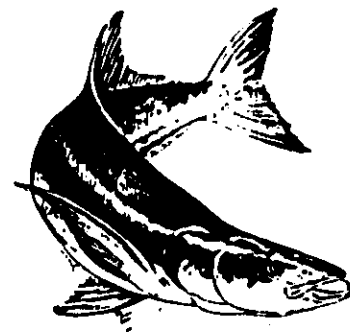
After running into many dead ends at the federal level, the agent received the assistance he needed from Lt. Col. Charlie Clark and Capt. Jeff Mayne of the Enforcement Division of the Louisiana Department of Wildlife and Fisheries. Clark and Mayne, who as law enforcement professionals, have an obvious interest in good information reaching the public, took the concept to the Law Enforcement Committee of the Gulf States Marine Fisheries Commission.

Taking the request through the appropriate channels took several more years, but in August, 2001, the **Mariner Information Radio** pilot project was announced. To demonstrate the value of Mariner Information Radio, the National Marine Fisheries Service and the National Weather Service will begin broadcasts of important changes and updates in fisheries regulations and public meeting schedules on the St. Petersburg, Florida, NOAA weather radio channel. If this pilot project is successful, it will lead the way to adding more radio transmitters in coastal areas to the Mariner Information Radio Network, where a steady stream of fisheries and weather information can be broadcast to the public.

When Adam, now serving as the chairman of the Marine Advisory Board, was informed of the success of his idea after seven long years, he immediately thanked the LSU AgCenter/Sea Grant Program, the Louisiana Department of Wildlife and Fisheries, and his fellow Marine Advisory Board members for their patience and persistence in trying to make peoples' lives better. This project is an ideal example of how one person's idea, with the cooperation of local agencies, can make a big difference.

COBIA TAG AND RELEASE RESULTS

Since 1988, a cobia tag and release program has been coordinated out of the Gulf Coast Research Laboratory in Mississippi. More than 1800 fishermen and 500 boats have been involved in the program. A total of 11,130 cobia have been tagged and released and 728 (6.5%) have been recaptured.



The range of days-at-liberty" (the number of days between tagging and recapture) ranged from one to 2208 days. About 60% of the recaptures were made within 1 year. The six longest days-at-liberty are as follows:

<u>Days-at-Liberty</u>	<u>Where Tagged</u>	<u>Where Recaptured</u>	<u>Dates</u>
2208 days (6.1 yrs.)	Key West FL	Horseshoe Rigs, MS	4/93 - 5/99
2100 days (5.8 yrs.)	Dauphin Island, AL	Venice, LA	5/91 - 1/97
1889 days (5.2 yrs.)	Mobile Bay, AL	Horn Island, MS	4/92 - 6/97
1758 days (4.8 yrs.)	Gulf Shores, AL	Navarre Beach, FL	7/94 - 4/99
1753 days (4.8 yrs.)	Mississippi River Delta, LA	Destin, FL	6/91 - 4/96
1670 days (4.6 yrs.)	Key West, FL	South Timbalier, LA	10/94 - 5/99

The greatest distance traveled by any tagged cobia was estimated at 1300 nautical miles. This fish was tagged off of the Chandeleur Islands in eastern Louisiana and recaptured 1046 days later off Hardeeville, South Carolina. Two other cobia each traveled more than 1200 miles. One was tagged off of Pensacola Beach and recaptured at Murrells Inlet, South Carolina. The other traveled from South Marsh Island, Louisiana to Daytona Beach, Florida in only 238 days. The all-time speed record is held by a fish tagged at Port Canaveral, Florida and recaptured 700 miles and 46 days later off Apalachee Bay, Florida. This fish averaged moving more than 15 miles per day.

Overall, 81% of the recaptures in the northern Gulf were originally tagged in the northern Gulf and 57% of the south Florida recaptures were tagged there. Research seems to indicate that most cobia likely migrate in spring from south Florida waters where they have spent the winter. Movement is northward along the Florida Gulf Coast, then westward along Alabama toward Mississippi and Louisiana. A reverse migration probably takes place in the fall, although not much data on the route exists.

But the data shows that not all cobia migrate, as 21 winter recaptures have been made in the northern Gulf, most at depths of more than 100 feet. None of these fish were fish that had been tagged in south Florida. Some fish may stay in the northern Gulf year-round. It is also known that some cobia stay in south Florida waters year-round and do not migrate.

This program has also provided strong clues that cobia have the ability to "home in" on exact locations. Thirty fish have been recovered at the exact site that they were tagged at 1 to 3 years earlier. It is very unlikely that they overwintered at these sites, as they were in shallow water (60 feet deep or less) where winter water temperatures can drop dramatically. More than 242 cobia were recaptured in the same general area as they were tagged in.

Cobia Tag and Release Program Coordinators, Jim Franks and Read Hendron are interested in having more anglers participate in the program. They may be called at 228/872-4202. Their address is Gulf Coast Research Laboratory, P O Box 7000, Ocean Springs, MS. 39566

They are also requesting that anyone capturing ANY tagged cobia more than 50 pounds (no matter who tagged it), call them collect before cleaning the fish and throwing away the carcass. They need the heads of these larger fish for age and growth research.

Source: *Cobia Tag and Release Newsletter*. Number 11, March 2000. Jim Franks and Read Hendon. Gulf Coast Research Laboratory, Ocean Springs, MS.

FISHERIES SEMINARS REMINDER

Just a reminder that on November 29, the LSU AgCenter's Louisiana Marine Extension Program in cooperation with the National Fisherman Magazine is sponsoring a series of free commercial fishing seminars at the International Work Boat Show at the Ernest M. Morial Convention Center in New Orleans. Sessions begin at 10:00 a.m. with the agenda below.

10:00 a.m. - 12 noon. Blue Crabs: Are They Overfished?

Blue crabs have been declared overfished in the Chesapeake Bay and harvests are scheduled to be reduced by 15%. Reductions in supply will affect supply and prices nationwide. Are blue crabs likely to be found as overfished in the rest of the species' range, especially the gulf states? A scientist from the Virginia Institute of Marine Science, Jacques van Montfrans explains how Chesapeake crab populations got into trouble and how long they may stay that way. Louisiana Wildlife and Fisheries Biologist Vince Guillory will explain the likelihood of blue crabs in the gulf states being overfished.

1:00 p.m. - 2:00 p.m. River Diversions: Will They Affect Fisheries?

The most fisheries-productive wetlands in the United States, those of the Mississippi River Delta, are disappearing beneath the sea at a fast rate. Scientists now agree that the most effective way to prevent further loss and perhaps even rebuild some of these wetlands is with large diversions of river water and sediments into these fisheries-rich wetlands. These river waters are cooler and of lower salinity than estuarine fisheries nursery waters and will affect the distribution and/or abundance of important fisheries species. LSU AgCenter Wetlands and Coastal Resources Specialist Rex Caffey will explain what the effects of river diversions on fisheries are likely to be and what will happen to fisheries production without diversions.

2:00 p.m. - 3:30 p.m. Shrimp Prices and Supply: Has the Bubble Burst?

Shrimp harvesters are coming off of two of the most profitable years in the history of the fishery. Heavy production along with strong prices combined to make the poor years of 1980s and early 1990s a memory. But for how long? Are the recent downturns in price a temporary situation and can shrimp catches hold up? Jim Nance of the National Marine Fisheries Service's Galveston Lab discusses the long and short term outlook for shrimp production and the factors likely to affect it. Ken Roberts, Fisheries Economist with the LSU AgCenter will discuss the world supply and demand situation, including whether foreign aquaculture supply will catch up to world demand.

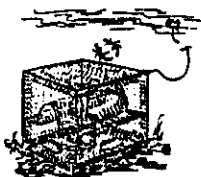
3:30 p.m. - 5:00 p.m. Charter Boats: Are They Recreational or Commercial?

In most allocation conflicts, two stakeholder groups get recognition at the bargaining table—recreational fishermen and commercial fishermen. Often overlooked is the charter fishing sector. Charter fishing is a growth industry and in many ports it is a powerful

economic engine that needs its own supply of fish. In some fisheries, including the Gulf of Mexico red snapper fishery, the charter fleet harvests the majority of the "recreational" catch. Gulf of Mexico Fishery Management Council member and charter fishing vessel owner Myron Fischer discusses the fisheries management and business implications of the industry being neither recreational nor commercial, yet being both. Are there lessons to be learned for the red snapper story?

TEXAS DERELICT CRAB TRAP CLEAN-UP

This spring, the Texas Legislature passed a law allowing the Texas Parks and Wildlife Department (TPW) to close the crab season for 10 to 30 days some time in February and March to clean up lost or abandoned crab traps. In response, TPW held 8 workshops and met with their Crab Advisory Committee, the Crab Review Board, and the Finfish Review Board to develop a plan.



What they came up with was a 16-day coastwide closure from February 16 to March 3, 2002. During the first 7 days of the closure, only TPW game wardens will be collecting abandoned traps. After that, all other traps will be defined as litter and can be picked up by anyone. These traps must be disposed of properly and cannot be reused. TPW plans to make this a community volunteer effort. Some commercial crabbers may be volunteering their boats to assist with the effort.

M.P.A. CONCEPT NOT GOING AWAY

The South Atlantic Fishery Management Council is still moving forward to develop a series of marine protected areas (MPAs) strung out between North Carolina and Florida. The list of 24 proposed areas, down from the 42 first proposed, includes some areas where only trawling, longlining and anchoring would be prohibited, and other areas where no fishing at all would be allowed, such as a 60 square mile block off of Cape Canaveral, Florida.

South Atlantic recreational fishermen still aren't happy with the idea. At a council workshop on MPAs on August 23, recreational anglers lined up to voice their opposition. One Florida fishermen said "I want the same freedom to go out in the ocean as Christopher Columbus had. Use the methods that work. Not this. All of us are willing to do all it takes to help the fishery, but when you start closing off pieces of God's ocean, I can't buy it."

In reply, Council biologist Kerry O'Malley told them that concept is not going to go away. Rather, the focus is on where they will be and what they will look like. He cited strong support for the idea from three environmental groups, the Environmental Defense Fund, the Ocean Conservancy and Reefkeepers International.

Some scientists support the use of MPAs as a management tool because they may protect fish stocks from genetic changes caused by fishing pressure, which tends to harvest the largest, fastest-growing individuals within a species. MPAs would also, in concept, provide breeding pools of fish to restock areas open to fishing, as well as provide safeguards against overfishing. Finally, MPAs are designed to manage ecosystems rather than individual species. Ecosystems are complex, involving many species, many of which science knows little about.

South Atlantic MPAs are being developed primarily for the management of reef fish, such as snappers and groupers. These are the same species that occur in the Gulf of Mexico. In the gulf, the concept of fisheries management using MPAs has not yet been fully explored.

Source: *No-Fishing Zones are on Their Way*. Don Wilson. Orlando Sentinel Newspaper. August 24, 2001.

THE GUMBO POT

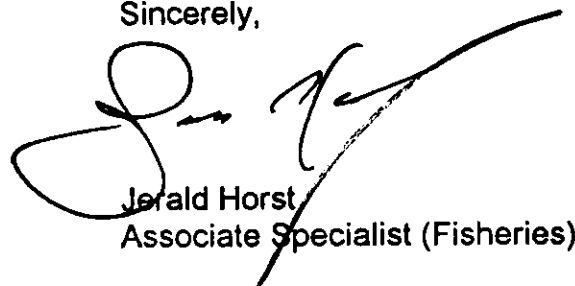
Louisiana Oyster Curry

Curries are one of my favorite ways of preparing seafood. Don't leave out the chopped sour apple. The best curries have a hint of fruit. I used a granny smith apple.

2	tsp curry powder	5	tbsp chopped sour apple
2	tsp flour	1	quart oysters, drained,
2	cups cream		lemon juice,
3	tbsp minced onion		Creole seasoning
		2	cups rice

Blend together curry powder and flour in a medium sauce pan. Add cream, onion and sour apple. Bring to a boil and simmer 20 minutes. Cook rice in separate pot while sauce is simmering. Add oysters to the sauce and cook until the edges of the oysters curl. Remove from heat and add a squirt of lemon juice. Serve with a border of cooked rice. Serves 4 to 6.

Sincerely,



Jerald Horst
 Associate Specialist (Fisheries)