

Lagniappe



Research and Extension Programs
 Agriculture
 Economic/Community Development
 Environment/Natural Resources
 Families/Nutrition/Health
 4-H Youth Programs

January 3, 2006 Volume 30, No. 1

LAGNIAPPE SUBSCRIPTIONS

The *Lagniappe* fisheries newsletter is published monthly by the LSU AgCenter's Sea Grant Program. The goal of its editors is to keep recreational and commercial fishermen informed of the latest in fisheries-related research results and all fisheries regulation or law changes. Free e-mail subscriptions can be made by e-mailing a request to jhorst@agctr.lsu.edu. Be sure to include the parish of residence or if out-of-state, the state. Readers may also subscribe to the paper version delivered by mail with the form on the right.

SUBSCRIPTION FORM

LAGNIAPPE FISHERIES NEWSLETTER

\$10.00 PER YEAR
 12 ISSUES PER YEAR

NAME _____

STREET ADDRESS OR PO BOX _____

TOWN _____

STATE _____ ZIP CODE _____

PARISH (If in Louisiana) _____

Telephone Number (To be used only for delivery error) _____

Check Money Order

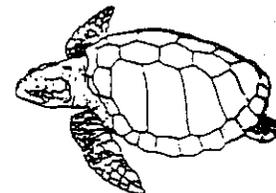
Make check or money order payable to **LSU AgCenter**

Send subscription form and payment to:

ATTN: Ruth Mutrie
 P O Box 25100
 Baton Rouge, LA 70894-5100

2005 KEMP'S RIDLEY TURTLE NEST COUNT

After a 14% drop in the number of nests on Mexican beaches in 2004, the 2005 Kemp's ridley sea turtle nest count increased by an astounding 41% to 10,099. The number of hatchlings (baby turtles) produced also set a new modern record at 630,737, a 26% increase over 2004. If this rate of recovery continues, it may be possible to remove the species from the Endangered Species List in the next five years.



A State Partner in the Cooperative Extension System

The LSU Agricultural Center is a statewide campus of the LSU System and provides equal opportunities in programs and employment. Louisiana State University and A. & M. College, Louisiana parish governing bodies, Southern University, and United States Department of Agriculture cooperating.

In 1974, an estimated 40,000 Kemp's ridleys arrived in one in one mass nesting event. By the mid-1980's, nest numbers had declined to 702. The turtle's decline was primarily due to the collection of eggs on the beaches and the killing of the adults for meat and other products. Additional deaths were also caused by accidental catch in shrimp trawls. The decline in numbers of Kemp's ridley sea turtles brought on the mandatory use of TEDs in shrimp trawls in an effort to save it.

<u>YEAR</u>	<u>NO. OF NESTS</u>	<u>YEAR</u>	<u>NO. OF NESTS</u>
1978	924	1992	1,275
1979	954	1993	1,241
1980	868	1994	1,562
1981	897	1995	1,930
1982	750	1996	2,080
1983	746	1997	2,387
1984	798	1998	3,845
1985	702	1999	3,640
1986	744	2000	6,277
1987	737	2001	5,442
1988	842	2002	6,436
1989	888	2003	8,323
1990	992	2004	7,147
1991	1178	2005	10,999

This species nests mostly on Mexico beaches, with the largest concentration being at Rancho Nuevo, but nesting in other areas does occur. In 2005, a total of 51 Kemp's ridley nests were found on the Texas coast, including seven on Galveston Island, one on Matagorda Peninsula, three on Matagorda Island, two on Mustang Island, one on North Padre Island north of Padre Island National Seashore, 28 at Padre Island National Seashore, six on South Padre Island, and three on Boca Chica Beach.

This breaks the previous record of 42 Kemp's ridley nests recorded in Texas during 2004. Overall, the number of Kemp's ridley nests found on the Texas coast has increased during the last decade (1995 - 4 nests, 1996 - 6 nests, 1997 - 9 nests, 1998 - 13 nests, 1999 - 16 nests, 2000 - 12 nests, 2001 - 8 nests, 2002 - 38 nests, 2003 - 19 nests, 2004 - 42 nests).

While some of the nesting on Texas beaches may be completely natural, much of it is due to human efforts from 1978 to 1993 to establish a Kemp's ridley breeding colony outside of Mexico. During the 1978-1988 period, a total 22,507 eggs were transported from Mexico to Padre Island National Seashore to be hatched there. Three of the 2005 nesting females were from eggs hatched there in 1986, 1987 and 1988. Eight nesting females came from Mexican hatchlings that had been transported from Mexico to Texas in 1989-1993 and "head-started" there by the National Marine Fisheries service in captivity for 9 -11 months before release.

This species, known to scientists as *Lepidochelys kempi*, and in Spanish as "tortuga lora" was named for a Richard Kemp, a fisherman who found the species in

Florida in 1906. As an adult, it is the smallest species of sea turtles, reaching only 75-100 pounds. Their preferred food is crabs, but they will also eat dead fish, shrimp, clams and sea urchins.

The turtle must reach about 10 years of age before it can produce eggs. Females return to the beach where they born to nest. The Kemp's ridley is the only sea turtle that nests in the daytime. Hatchlings come out of the sand at night and immediately rush into the surf.

Source: Personal Communication with Luis Jaime Pena. Kemp's Ridley Sea Turtle Conservation Project. Gladys Porter Zoo, Brownsville, Texas.

RED SNAPPER I.F.Q. PLAN MOVING FORWARD

The Gulf of Mexico Fishery Management Council gave its approval to another step in the process of creating individual fishing quotas (IFQs) for the Gulf of Mexico commercial red snapper fishery. IFQs, sometimes called individual transferable quotas (ITQs), would allocate to each individual snapper fishermen in the system a percentage of the annual quota to be harvested.

The quota holder could then harvest his allowable catch at any time in the year, such as when prices are higher. Under the current derby-style management, red snapper fishermen can only fish the first 10 days of each month. Everyone goes out at the same time and everyone quits fishing at the same time. The market is either glutted with fish or none are available. Prices received for catches suffer under such a system.

Fishermen holding individual quotas would have the freedom to sell, give away, or lease their shares to other fishermen. It is anticipated that as some fishermen buy out others, the number of fishermen will be reduced to a smaller number who can each fish for more of the year before reaching their individual quota. Currently, there are 128 Class I license holders who are allowed to make 2,000-pound catches per trip and another 460 Class II license-holders allowed 200 pounds of red snapper per trip.

After some early skepticism from commercial fishermen, the IFQ approach has received stronger and stronger support from them. Supporters say that besides improving prices, costs of production should be reduced because fishermen won't be forced to come in before they finish fishing. The current derby fishery also forces fishermen into dangerously going to sea under bad weather conditions to fish during the short 10-day seasons when they are open.

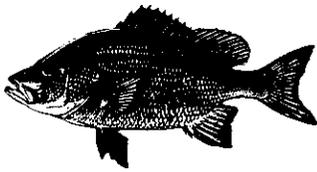
Gulf Coast fishermen will have one more chance to vote for or against the proposal. If they approve the measure, a final decision can be expected by July 2006.

In the meantime, Gulf of Mexico charter fishermen are proposing that they be allowed to buy quota shares from commercial fishermen willing to sell. The continued overfished state of the Gulf's red snapper population has them worried. Fear exists that a cut in the total harvest quota from 9.12 million pounds to between 2 and 6 million

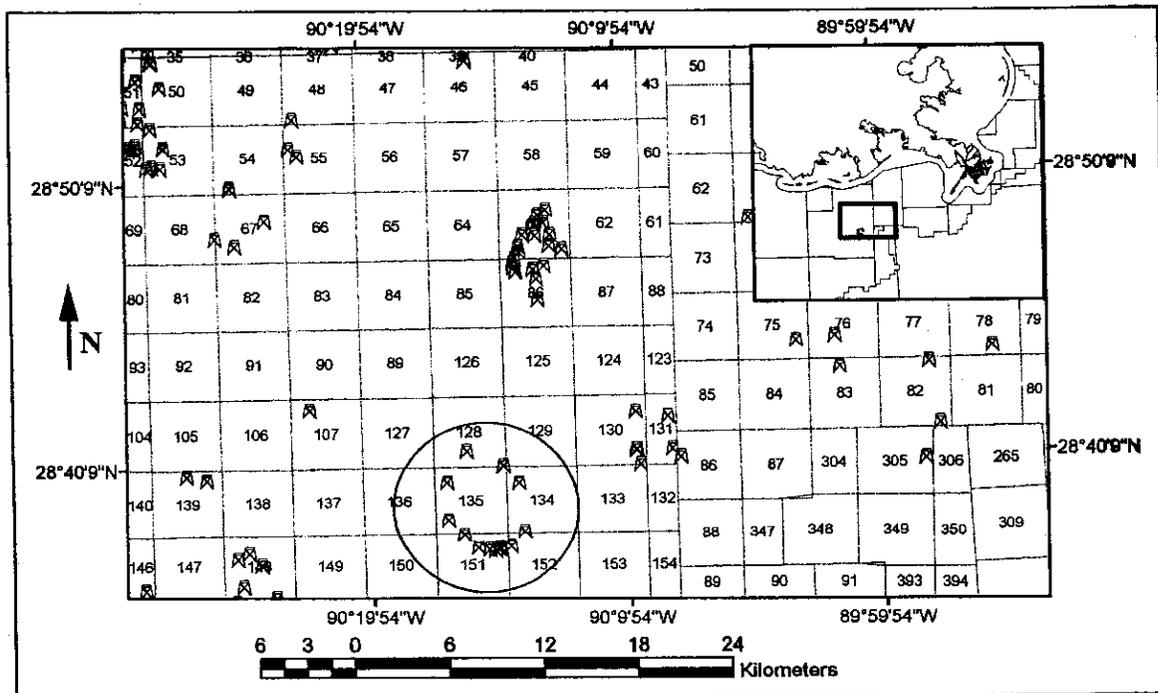
pounds could be made. In a worst-case scenario, the charter fishermen could face a 1-2 fish bag limit and a 3 to 4-month season.

RED SNAPPER MIGRATION & MARINE RESERVES

Red snappers, *Lutjanus campechanus*, are one of the most heavily managed species in the Gulf of Mexico and the South Atlantic. In spite of a great deal of research and very restrictive regulations, the species remains overfished. Because it is a reef fish and reef fish generally are considered to be fish that tend to stay put in one spot, marine reserves, also called marine protected areas, have been suggested for use in red snapper management.



In 2003, Louisiana State University scientists conducted research to study exactly how much movement occurs in red snapper populations. They captured 125 red snappers by hook and line at several platforms in South Timbalier, 30 miles south of Port Fourchon, Louisiana. Each fish had an individually coded, sound-pinger implanted in its body cavity. No pingers were implanted in fish with stomachs sticking out of their mouths or with intestines protruding from their anus. After a short recovery period, the fish were released at 5 oil and gas platforms in the area. Movements of the fish were tracked by receivers attached to 7 platforms and one platform toppled as an artificial reef. Water depths ranged from 100 to 140 feet reef. The map below shows the study area.



map of the study area in the South Timbalier MMS block is 128, 134, 135, 151, and 152. The inset in the upper right corner shows the location of the study area with respect to the coast of Louisiana.

Some were released where caught and others were released at different platforms within the study area. Relocated fish were much more likely to move from where they were released than fish released where caught, but they showed no homing behavior. No patterns occurred in the movement of fish that did move.

Unlike several other studies, which showed that red snappers stayed at a site, this study showed red snappers to have poor site fidelity. A difference may be that none of the other studies were done at offshore oil and gas platforms.

The research showed little movement from the release location on a day by day basis, but at the end of 6 months, at least 10% of the fish had moved from their site. At that rate only 80% of the red snappers would be at the same site one year after tagging. As seen in other studies, red snappers did show movement away from the reef at night to feed on mud and sand bottoms, then back to the reef again for daylight.

Because of the fairly high annual movement rate, the scientists in this study said that marine reserves would not be an effective management tool for red snappers. Instead they recommended that the Gulf States should expand their artificial reef programs and allow more old oil and gas platforms to remain as valuable habitat in the northern Gulf.

Source: *Fidelity of Red Snapper (Lutjanus campechanus) to Petroleum Platforms and Artificial Reefs in the Northern Gulf of Mexico*. Megan B. Peabody and Charles A. Wilson. U.S. Department of the Interior, Minerals Service, Gulf of Mexico OCS Study MMS 2005-XXX. 56 pp.

ITS ALL POLITICS — — OR IS IT?

Louisiana is a peculiar place — a place of contrasts. Perhaps nothing better illustrates the contrast than a recent survey commissioned by the Southeastern Association of Fish and Wildlife Agencies and conducted by Responsive Management, a public opinion firm.

Responsive Management conducted a public poll in the 16 southeastern states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia designed to gather public opinions about fish and wildlife issues and attitudes towards state fish and game agencies.

Many questions in the survey were phrased as statements. The people being polled were asked if they strongly agreed, moderately agreed, neither agreed or disagreed, moderately disagreed, strongly disagreed, or didn't know.

One statement in the survey said, "The work of the Louisiana Department of Wildlife & Fisheries is primarily influenced by state politics. Do you agree or disagree with this statement?" Not surprisingly, Louisiana, where it has been said that politics is the most popular spectator sport, led all states with 49% in agreement. The 16-state

average was less than 44%. The lowest states in agreement were Missouri (35%) and Kentucky (39%). Louisiana also led all states in the percentage of people who strongly agreed with the statement.

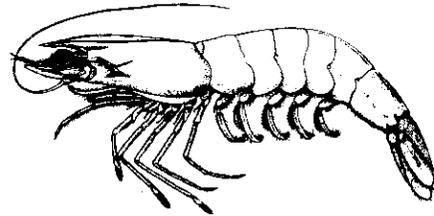
This was followed by a second statement, "Scientific fish and wildlife methods serve as the primary guide for the work of the Louisiana Department of Wildlife and Fisheries. Do you agree or disagree with this statement?" It would seem logical to conclude that if politics were the primary influence over the work of the department that science would have had a smaller role to play.

Well, Louisiana people confounded things again, with 62% saying that science was the primary guide for the department's work. The nearest other state in agreement was Mississippi, with 59% agreement. The 16-state average was 53%. The states that agreed least with the statement were Virginia (44%) and Florida (45%). Louisiana also led all 16 states with the number of people who strongly agreed with the statement at 35%, fully 6 points higher than runner-up Mississippi.

Source: *Public Opinion on Fish and Wildlife Management Issues and the Reputation and Credibility of Fish and Wildlife Agencies in the Southeastern United States*. Responsive Management. 2005.

COMMENTS BEING ACCEPTED ON SHRIMP PLAN AMENDMENT

The National Marine Fisheries Service is now accepting public comment to Amendment 13 of the Shrimp Fishery Management Plan for federal waters of the Gulf of Mexico. The main points in the proposed amendment are below.



- Requires vessels that fish for royal red shrimp in the Gulf to have a royal red shrimp endorsement to their federal shrimp vessel permit.
- Proposes a 10-year moratorium on issuing of new federal shrimp vessel permits. Under the moratorium, current permits would be fully transferable. To be eligible for a permit, a vessel must have been issued a valid commercial shrimp vessel permit by on December 6, 2003 or earlier. Also, any vessel owner who sold his qualified vessel, had his qualified vessel repossessed, or otherwise lost, and who purchased another commercial shrimp vessel permit for a vessel equipped for offshore shrimping before the date that Amendment 13 becomes effective, shall be eligible to renew the permit under the moratorium.
- Establishes a program where some federally permitted shrimp vessels would be equipped with electronic logbooks to get better information on fishing effort.
- Establishes a program where some federally permitted shrimp vessels would carry federal observers on board to gather information on catch, fishing effort and bycatch.

- Revises reporting requirements to include mandatory reporting of landings and vessel and gear characteristics.
- Sets maximum sustainable yield and optimum yield numbers for brown, white and pink shrimp and sets stock status markers for royal red shrimp.

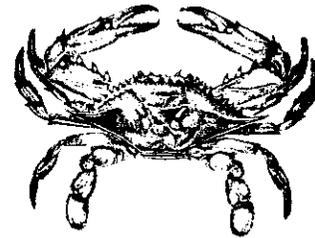
Written comments must be received no later than 5 p.m., Eastern Time, on **January 23, 2006**. You may submit comments by any of the following methods:

- E-mail: 0648-AS15.NOA@noaa.gov. Include in the subject line the following document identifier: 0648-AS15-NOA.
- Federal e-Rulemaking Portal: Follow the instructions for submitting comments at <http://www.regulations.gov>.
- Mail: Steve Branstetter, Southeast Regional Office, NMFS, 263 13th Avenue South, St. Petersburg, FL 33701.
- FAX: 727-824-5308, Attention: Steve Branstetter.

Copies of Amendment 13 are available from the Gulf of Mexico Fishery Management Council, 2203 North Lois Avenue, Suite 1100, Tampa, Florida, 33607; phone: 813-348-1630; fax: 813-348-1711. E-mail: gulfcouncil@gulfcouncil.org

SIZE DOES MATTER

One of the more beautiful creatures in coastal marshes is a large male blue crab, with his massive bright blue claws. Male blue crabs grow significantly larger than females and like with everything in nature, there is a reason.



Blue crabs have an interesting reproductive cycle. Females have a single opportunity to mate in their life, during the last molt of their shell. Typically, she pairs up with a male, who cradles her under his body for several days before she molts and up to 4 days after the molt. Mating takes place over 5-12 hours, during which the male passes packets of sperm called spermatophores into the female.

The female can store the sperm from this one mating in her body for up to 12 months and can produce 8-11 broods of eggs. Each brood has 2-6 million eggs.

In the wild, large males are more often paired up with females than smaller males and larger males are usually paired with larger females. Not only body size counts, but large claws do too. Males that are missing one or both claws or that have small claws cannot compete well with males with two large claws.

Large males tend to guard females longer than smaller males after mating to prevent them from mating with other males. Large males also produce and transfer to females more sperm and spermatophores.

If a male mates with a second female shortly after mating with the first one, his supplies of sperm are reduced, producing an advantage for larger males, which began with more sperm. It takes approximately 9 days for a male to rebuild his sperm supplies after a mating. Another factor that influences the amount of sperm that a male passes to a female in mating is the presence of other males. If many other males are present in the environment, a male will transfer more sperm to his mate and guard her longer than if few males are present.

There is some evidence that the number of fertilized eggs that a female can produce can be limited by the amount of sperm she gets during her last molt. Sperm seems to lose its viability the longer the female stores it.

Fisheries biologists tend to think in terms of managing a resource to protect enough females to produce eggs for the next generation. Having enough males present is taken for granted, because in most fisheries species, males produce so much sperm, and because they broadcast it out into the water where it can fertilize the eggs of more than one female.

Blue crabs may be different. Where ever they are fished, large males are targeted as the most highly-prized catch. Removing large numbers of large males reduces female access to mates with large sperm supplies. The lack of competition between males also results in a male protecting a female for a shorter time after mating.

Fewer large males means that small males, which already have smaller sperm supplies, will mate more frequently than they can rebuild their sperm supplies, resulting in even less sperm per mating.

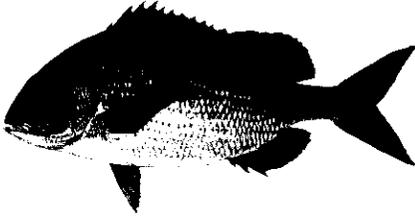
Source: *A Review of Male Mating Success in the Blue Crab, Callinectes sapidus, in Reference to the Potential for Fisheries-Induced Sperm Limitation.* Paul Jivoff. Proceedings of the Blue Crab Conference 2000. Bulletin of Marine Science, No. 72(2):273-286, 2003

LEGISLATURE PASSES OYSTER LEASE BILL

The 2005 Special Session of the Louisiana Legislature convened to handle problems created by Hurricanes Katrina and Rita passed one bill directly relating to fisheries. House Bill 8, sponsored by Representative Ken Odinet and others, gives oyster leaseholders an additional 60 days (to May 1, 2006) to renew their leases that expire January 1, 2006. The deadline to pay annual rent on oyster leases has also been extended, by 120 days, to July 1, 2006.

PORGY

Perhaps it's the name. The name "porgy" just doesn't command respect like snapper or grouper does. Maybe that is why fishermen often call red porgies "white snappers".



Actually, red porgies (*Pagrus pagrus*) aren't white, but they aren't red either. They have a silver base body color with a pink blush that becomes more pronounced towards the top of fish. A close look will show that the body is highlighted by rows of small blue dots. Its body is vaguely "snapper-shaped", more so than the other 12 members of the porgy family, Sparidae.

The largest and most well-known member of the porgy family in the Gulf is the sheephead. Besides the sheephead and the pinfish, most other members of the family, including the red, whitebone, jolthead, knobbed, saucereye, and littlehead porgies live in offshore habitats very similar to those of other reef fish such as snappers and groupers.

Like other reef fish, porgies make excellent tablefare, if fishermen are knowledgeable enough to keep them. Few recreational anglers fish directly for them off of Louisiana, where they are found in 90 to 600 feet of water. Red porgies do turn up in the catches of commercial snapper fishermen in the northern Gulf.

Most red porgy caught in the Gulf of Mexico are landed in Florida. From 1986 to 1991, an average of almost 84% of the commercially-caught and 77% of the recreationally-caught red porgy were landed there. Currently, there are no regulations on red porgy harvest in the Gulf.

In the south Atlantic, the red porgy is considered overfished and is under tight management. This, and the biology of the fish, have caused concern that not enough is known about the fish in the Gulf. The average size of red porgy caught in the Gulf seems to have declined since the early 1980s. Also, the fish is a protogynous hermaphrodite. All of them begin their lives as females and at some later stage in their lives, they change to males. Large male fish seem to be easier to catch because they are more aggressive than smaller females.

These concerns led biologists to sample 877 red porgy from recreational headboats and commercial catches from the Florida Middle Grounds and off west-central Florida. A total of 601 fish, ranging in length from 8.2 to 18.2 inches (average 12.8), were obtained from the recreational fishery. The commercial fishery produced 276 red porgy, from 10.6 to 19.6 (average 14.0) inches long. Males averaged larger (13.6 inches) than females (12.6 inches), which is to be expected in a species that is protogynously hermaphroditic.

Otoliths (ear bones) were removed from each fish and cross-sectioned. Age was determined by counting the annual bands in each otolith. Ages ranged from 1 to 17 years, with 85% of the fish being between ages 3 and 8. No females older than 10 were found.

Red porgy grow very quickly their first year, reaching an average of 10.4 inches during the second year. (Note that such a fish is considered age 1 because only one growth band has been laid down in the otolith.) After this growth spurt they grow much slower, averaging 1.6 inches per year. Females and males grow at very close to the same rate.

Through age 4, females outnumbered males, even though some males were present at all ages. At age 5 (average length 13.8 inches), the sex ratio was even. The percentage of males increased after that and by age 11, all the fish in the sample were males. The biologists classified 68 fish (8% of the sample) as fish in transition from female to male. The overall sex ratio was 1 male to 1.6 females.

Only 10 of 449 females were immature. All were in age classes 2 and 3. All 6 age-1 females in the sample were mature and the smallest mature female was 9.2 inches long. Red porgy in the Gulf of Mexico spawn from December to April, although ready-to-spawn males were found in every month except July and September.

Compared to previous research, this effort showed a slightly smaller average size at age for older fish. This could be due to fishing pressure removing more of the larger, faster-growing fish in each age class from the population.

The sex ratio found in this study was more balanced than what was found in research in the Gulf in the early 1980s. This is a positive sign, as increasing fishing pressure tends to remove larger males first and the sex ratio can become very unbalanced, with few males and many females. This is what has happened in the south Atlantic, where the fish has been classified as overfished.

Finally, this study showed Gulf red porgies changing from females to males at a smaller average size than in the 1980s. This can be due to fishing pressure that removes larger members of the fish population. For most protogynous reef fish species, the removal of males causes some of the remaining females to change sex. If fishing pressure is great and more and more of the larger fish are removed, smaller and smaller females will change to males.

Source: *Age, Growth, Mortality and Reproduction of Red Porgy, Pagrus pagrus, from the Eastern Gulf of Mexico.* Peter B. Hood and Andrea K. Johnson. Fishery Bulletin. US Department of Commerce. Volume 98, Number 4. October, 2000.

UNDERWATER OBSTRUCTION LOCATIONS

The Louisiana Fishermen's Gear Compensation Fund has asked that we print the coordinates of sites for which damage has been claimed in the last month. The coordinates are listed below:

<u>Loran Sites</u>			<u>Lat. & Long. Sites</u>			
27483	46922	IBERIA	29 13. 701	90 01.285	JEFFERSON	
28172	46828	TERREBONNE	29 19. 471	89 56.431	JEFFERSON	
28628	46852	JEFFERSON	29 19. 713	89 52.002	JEFFERSON	
			29 24. 668	90 32.280	TERREBONNE	
			29 29. 090	90 00.868	JEFFERSON	

THE GUMBO POT

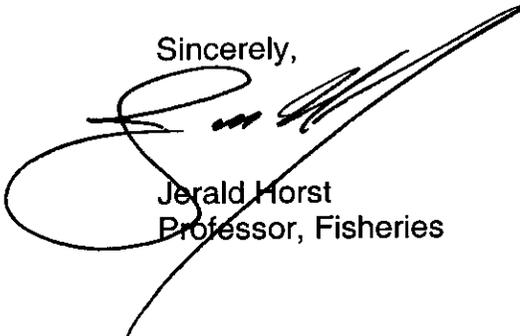
Smothered Shrimp

Contrary to what our friends "up north" think, Cajun cooking is not about using exotic and weird ingredients (unless crawfish are considered weird) that are overly seasoned with red pepper. Smothering, cooking with low heat, moisture, and onions, is a basic Cajun cooking technique—nothing flashy, just delicious. It is most often used with vegetable dishes such as snap beans, okra or potatoes, but also works really well on shrimp. The simple list of ingredients will really allow the taste of the shrimp to come through undisguised, so start with the right ingredient — fresh, local shrimp.

2	large onions, slivered	½	tsp garlic powder
3	tbsp cooking oil	½	cup water
1¼	tsp salt	1	lb small to medium shrimp tails
1	tsp black pepper		rice

In a heavy pan, sauté the onions in the oil over a medium heat. The onion slivers should end up wilted and clear, but with toasted edges. Add salt, pepper, garlic powder and water. Allow dish to come to a boil and then add shrimp. Cook over medium-low heat until shrimp are done (no longer translucent). Do not overcook or shrimp will become tough. Serve over rice. Serves 2.

Sincerely,



Jerald Horst
Professor, Fisheries