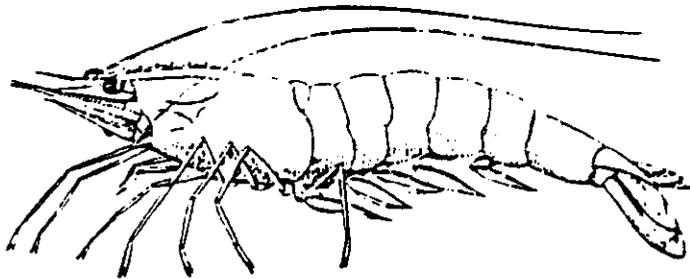




August 3, 1998
Volume 22, No. 8

SEA GRANT PROGRAM



LAGNIAPPE

MARINE ADVISORY BOARD NEWS

In 1997, the Jefferson Parish Marine Fisheries Advisory Board was approached by several commercial shrimpers about the possibility of getting shrimp and other fishing season closures announced on NOAA Weather Radio broadcasts (channel 1).

Shrimpers make multiday trips, some lasting over 3 weeks. A season closure may occur during a trip without their knowledge. Often television reception is very poor in the areas they work and season closure announcements are not commonly made on TV anyway.

This leaves them with word of mouth news obtained over their radios. The shrimpers making the request of the board stated that 3 or 4 different closure dates for one closure will often be heard by this method.

The Marine Advisory Board experienced very little success working through NOAA on this project. They requested help from Jimmy Jenkins, Secretary of the Louisiana Department of Wildlife and Fisheries. Jenkins has assigned the project to Lt. Col. Charlie Clark of the Department's Enforcement Division. This began to produce results.

Clark has, so far, managed to get a commitment from the U. S. Coast Guard to announce season closures over VHF radio channel 16, the Coast Guard Channel. While this channel is not monitored as closely as channel 1, it does provide some relief.

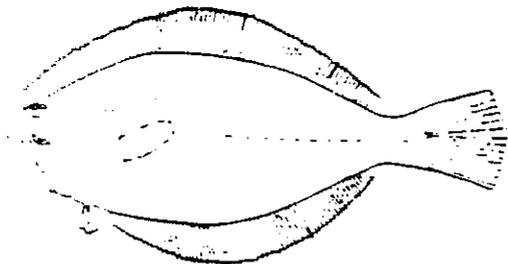
Clark has expressed confidence that, with time, he will be able to get these announcements on the weather channel also. It is a time-consuming process to walk the request through the proper channels. I will keep you posted on developments.

FLOUNDERS, FLOUNDERS, AND MORE FLOUNDERS

When Louisiana placed a bag limit of 10 on southern flounders only, many fishermen were prompted to ask just how many species of flounders occur in inshore and offshore Louisiana waters. The answer is surprising.

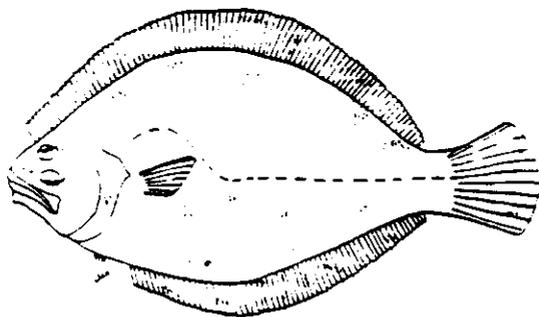
Flounders are divided into two groups, those with their eyes on the right side of their head and those with their eyes on the left side of their heads. Only three species of right-eye flounders occur in Louisiana, the fringed sole, the lined sole, and the hogchoker. All are very small.

An amazing 19 species of left-eyed flounders occur in and offshore Louisiana. I've eliminated 7 of them, the shrimp and twospot flounders because they are so rare, the three-eye and deepwater flounders because they only occur in very, very deep waters, and the spotted whiff, horned whiff and spiny flounder because they are very small animals. What follows is the lowdown on the rest of them.



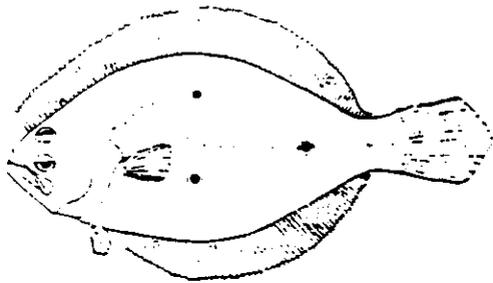
Southern Flounder
Paralichthys lethostigma

This is the flounder with the 10 fish limit. It is our largest, at up to 30 inches long. It is brownish and has many small light and dark spots on it. It is common in both inshore and offshore waters.



Broad Flounder
Paralichthys squamilentus

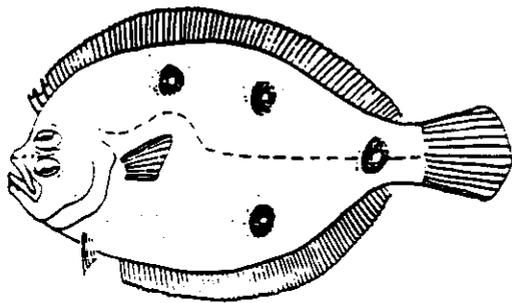
This is the other big flounder. I've seen it 18-20 inches long. The big ones are found in deep waters out to 1200 feet deep. Smaller ones can be found in lakes and bays. It is slightly darker than the southern flounder, but also has small spots on it. Its body width is at least half or more than its length. Southern flounders are more slender. Their body width is less than half their length. The eyeless side is also often a dusky gray color.



Gulf Flounder
Paralichthys albigutta

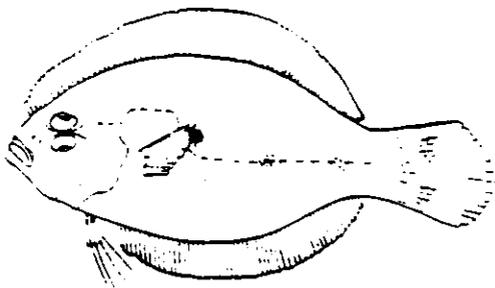
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This flounder is a dark or light brown color with 3 small ocellated (bulls-eye) spots arranged in a triangle. It reaches 15 inches in size. Adults are usually found in 60 feet or deeper waters, but younger ones are occasionally found inshore.



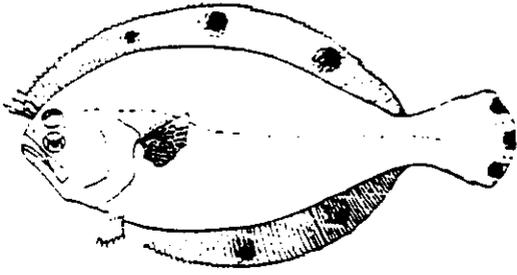
Ocellated Flounder
Ancylosetta quadrocellata

This 10 inch flounder is found inshore, and also offshore out to 150 feet deep. It has 4 dark ocellated spots on the body, although the front spot may be hard to see. It is a fairly common fish.



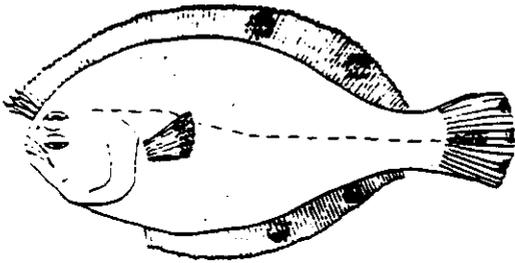
Sash Flounder
Trichopsetta ventralis

This uncommon flounder is the only one with 3 spots arranged on its lateral line. It is an offshore fish found 100 feet deep or deeper. It reaches 12 inches in size.



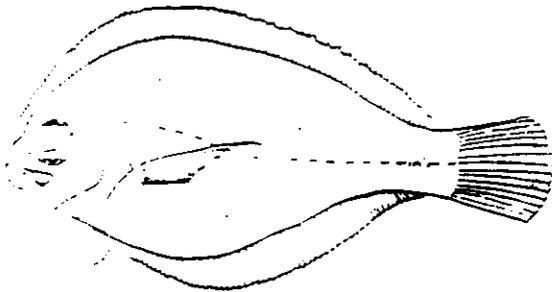
Mexican Flounder
Cyclopsetta chittendeni

A very common flounder found in waters 60 feet deep or more. It has 2 or 3 spots on its dorsal (back) and anal (belly) fins and 3 spots on the edge of its tail fin. It grows to at least 13 inches long.



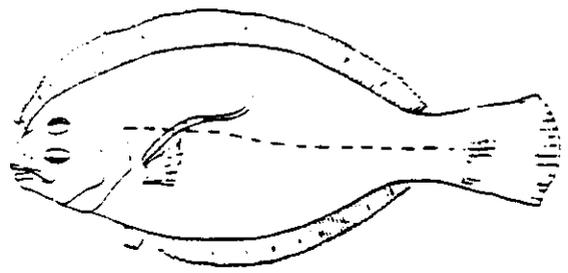
Spotfin Flounder
Cyclopsetta fimbriata

This common flounder reaches 15 inches. It is also found primarily offshore 60 feet deep or deeper. It has spots on the fins similar to the Mexican flounder but has an additional one in the center of its tail fin.



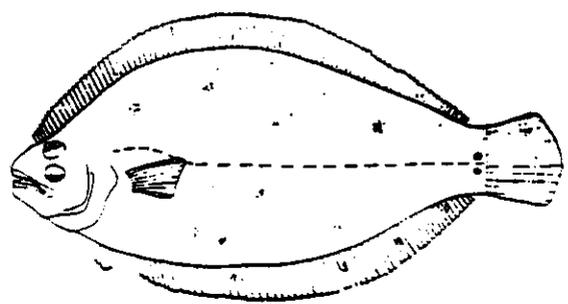
Shoal Flounder
Svachium aunteri

This is a very common flounder on offshore brown shrimp grounds. It is usually found outside of 30 feet deep. It is tan in color with vague spots and molting. It can be identified by a large (but not clear) dark blotch on the body at the base of the tail. It reaches 11 inches long.



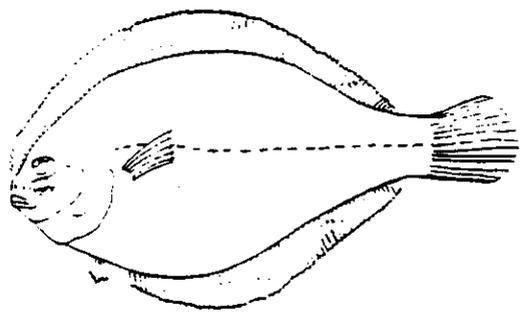
Dusky Flounder
Svaciium papillosum

This is also a common flounder on offshore brown shrimp grounds 40 feet deep or deeper. It is brownish with few distinguishing marks except that mature males have blue lines on their heads. The underside of this fish, especially on males, is slightly dark or dusky. It grows to 11 or so inches long.



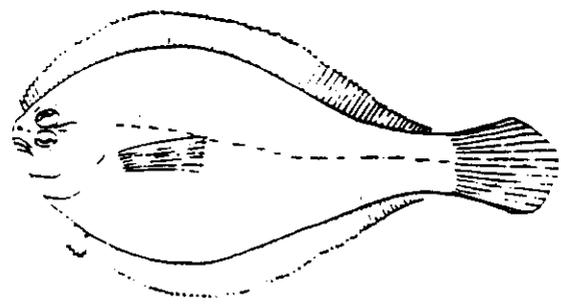
Bay Whiff
Citharichthys spilopterus

A small (6 inches) very common flounder found in both inshore brackish waters and offshore waters. It is very similar to dusky and shoal flounders, but has 2 small dark spots at the base of the tail.



Fringed Flounder
Etropus crossotus

This small fish is quite common and is found in lakes and bays and also offshore waters. It is a uniform brown color with no spots although the fins may be spotted. It reaches 7 inches in length.



Gray Flounder
Etropus rimosus

Another small flounder, usually under 6 inches long. It is not common and is usually found east of the Mississippi River in waters over 50 feet deep. Its body is brownish with distinct dark spots. Its pelvic fins (the two fins under the throat) have 3-4 dark bars.

Sources: *Saltwater Fisheries of Texas: A dichotomous Key.* Edward O. Murdy. *Fishes of the Gulf of Mexico: Texas, Louisiana, and Adjacent Waters.* H. Dickson Hoese and Richard H. Moore. *Fishes of the Northern Gulf of Mexico.* Jerry G. Walls.

PLACARDS FOR CHARTER GUIDES

We have recently prepared at the request of charter fishing captains, waterproof placards with the language shown on the right. Apparently, clients on some charter trips ask to be able to catch the guide's personal limit of fish as well as their own.

These 8 x 10 inch placards may be mounted in the boat or other suitable place. Any charter fishing captain who would like a placard may call, write or come by my office in Marrero.

NOTICE

LOUISIANA LAW PROVIDES THAT NO PERSON SHALL AT ANY TIME OR PLACE CATCH OR POSSESS MORE THAN THE LEGAL POSSESSION LIMIT OF ANY SPECIES OF FISH.

LOUISIANA LAW PROVIDES THAT NO PERSON (INCLUDING CHARTER BOAT FISHING GUIDES) SHALL TRANSFER ANY FISH TO ANY OTHER PERSON WHICH WOULD PUT THE RECEIVER IN POSSESSION OF EXCESS OF THE POSSESSION LIMIT.

REPORT ANY FISHERY VIOLATIONS TO THE LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES LAW ENFORCEMENT DIVISION AT 1-800-642-2511.
REPORT MARINE POLLUTION EVENTS AT 1-800-424-8882.



Louisiana State University
Agricultural Center
Lafayette, Louisiana

SHRIMPERS MEET ON SHRIMP IMPORTS

On June 26, leaders of the shrimp harvesting industry from several parishes, State Senator Mike Robichaux and a representative from Congressman Billy Tauzin's office met with attorneys from a Washington D. C. law firm to discuss the possibility of taking action against shrimp imports at the request of George Barisich, president of the United Commercial Fishermen's Association.

Shrimp imports into the U. S. have tripled in 25 years, largely spurred by increased aquaculture production in Asia and Latin America. Prices paid to domestic shrimpers for their catches have failed to keep pace with inflation since the early 1980's. Many shrimp harvesters feel that there is a connection between the two and that rising production costs and stagnant prices have placed them in an economic squeeze.

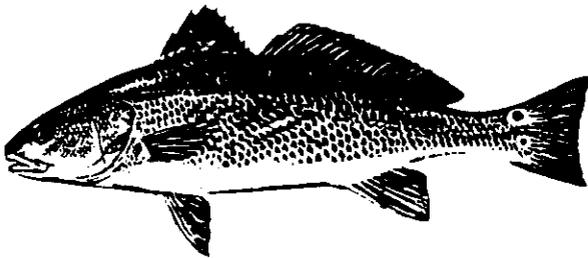
Under current anti-dumping laws, the U. S. Department of Commerce can impose anti-dumping duties to protect U. S. industries that have suffered injury from sales of imported goods at less than fair market value. Such action was taken last year against crawfish imports from China when tariffs ranging from 90 to 200 percent were placed on crawfish imports.

According to the attorneys at the meeting, the Gulf shrimp industry could satisfy the legal requirements for anti-dumping duties. A big obstacle would be for the shrimp industry to raise the funds needed to document the facts of the case. Expenses would be higher than for the Chinese crawfish investigation as shrimp imports come from several dozen countries.

Senator Robichaux will be coordinating more meetings on this and other subjects of concern to the shrimp industry over the next few months. Anyone interested in participating in future meetings is asked to contact Robichaux's office at 504/537-7064.

FEDS SAMPLING OFFSHORE REDFISH

Scientists with the National Marine Fisheries Service (NMFS) are sampling offshore populations of bull redfish this summer between Mobile, Alabama and Galveston, Texas. Much of their work will be done off of Louisiana.



Their goal is to recapture some of the 9733 adult redfish tagged in the same area last year. This is the first in-depth sampling of these spawning populations in about 10 years, according to Scott Nichols, Director of NMFS Pascagoula Lab.

The percentage of tagged redfish in this year's sample will give some indication of the numbers of redfish out there. Additionally, otoliths (ear bones) from some of the fish will be analyzed by biologists at LSU for age and growth information.

According to Nichols, there is some current disagreement over the degree of recovery of redfish stocks in the Gulf of Mexico. Research conducted by some states, including Louisiana, seems to indicate that escapement of younger redfish from inshore waters into the spawning population is high and that the SPR (spawning potential ratio) is also high. If so, this could allow for increased harvest of redfish.

Harvest of redfish in all five Gulf states was dramatically reduced, and harvest in federal waters was prohibited when Gulf redfish populations were declared overfished. The current sampling program is being conducted using purse seines under the direction of NMFS scientists. A preliminary report is expected sometime this fall.

HELP STILL NEEDED ON DEAD ZONE

The Department of Wildlife and Fisheries is still looking for cooperating shrimp fishermen and charter boat operators on their study of the dead zone.

What is the purpose of the study?

- Identify and map the hypoxic zone (sometimes referred to as the "Dead Zone")
- Estimate the economic impact of the hypoxic zone on the Louisiana Gulf Shrimp Fleet and Charter Boats

Who can participate?

- Participants must have a commercial fisherman's license and a shrimp trawl license **OR** they must have a charter boat fishing guide license
- Participants must have an electronic navigation instrument (Loran C or GPS) on their vessel
- Participants must spend part of their time between April and September fishing off the coast of Jefferson, Terrebonne, and/or Lafourche Parishes
- There are no vessel size requirements

What does it involve?

- Participants will keep a logbook recording fishing location, sea and weather conditions, expense, and harvest information on a per trip per boat basis
- No observers or special scientific equipment will be placed on board the vessel
- Most of the data will be collected by the captain and crew during normal operations
- Log sheets will be sent monthly to the Louisiana Department of Wildlife and Fisheries

Why should I participate?

- Participants will be paid up to \$1000 annually, depending on when they sign up

How do I sign up?

- Contact Robin Roberts, LDWF research coordinator: 504-765-2938

COASTAL TOURISM

You may ask why coastal tourism is a topic in a fisheries newsletter. Simply because coastal tourism, like any industry, is a consumptive industry. It competes for space and other resources with traditional coastal industries like commercial fishing and oil and gas production in Louisiana. With good planning however, it can also complement these industries.

Before the mid to late 1980's, oil and gas production was the dominant employer in the Louisiana coastal zone, followed by the fishing industry. When the slump hit the oil and gas industry, Louisiana's coastal communities went into a recession. This sent developers, planners and elected officials into a hunt to diversify the economies of coastal communities so that they weren't so dependent on one industry. Coastal tourism was, and still is, seen as a candidate for development.

Tourism is indeed a growth industry. Travel and tourism is the world's largest industry. In 1995, it generated \$3.4 trillion and employed 211.7 million people worldwide. It is estimated that travel and tourism will be responsible for 11.4% of all the money spent at the retail level in the world by the year 2005. In the U. S., travel and tourism, with six million jobs, is now the second largest employer after health care.

In terms of U. S. tourism, studies have shown that coastlines are the leading tourist destination, while national parks and historic sites are the second most popular destination. About 85% of tourist dollars are spent in coastal states. Coastal tourist activities include things such as beach going, recreational boating, cruises, whale watching, recreational and charter fishing, snorkeling and diving, bird watching, and nature appreciation.

Nature-based tourism (ecotourism), in particular, is growing. A 1992 survey by the U. S. Travel Data Center showed that 7% of U. S. travelers had taken one such trip and that 30% planned a nature tourism trip within the next three years. Bird watching alone is estimated to produce \$18 billion per year in the U. S. by over 24 million "birders". A large share of this is spent in coastal regions. Birding is big business.

While the Louisiana coastline doesn't have long stretches of white sand beaches and crystal-clear water, it does have birds-- lots of birds. In fact, it's a bird paradise. The state has large numbers of large wading birds such as egrets and herons, much larger numbers than famous birding sites such as the Everglades. It also has healthy populations of shorebirds and seabirds such as gulls and terns. Louisiana also has the largest concentrations of overwintering waterfowl in the country.

Finally, the state is dead center in the flight path of huge numbers of small song birds that spend their winters in South America and their summers across North America. They stage in Louisiana in the fall before their long nonstop flight across the Gulf of Mexico.

In the spring, an even more interesting event called "fallout" occurs. On their migration back from South America, these small birds must make another nonstop flight across the Gulf. On their first landfall they are usually exhausted and hungry, and fall out onto the first land area they find, especially if it has trees. There they rest and feed to build up their energy reserves before scattering all over North America to their summer breeding grounds.

During fallout, large numbers of a great many species of birds are found in Louisiana. During the summer a birder would have to travel thousands of miles across America to see the variety of birds found in Louisiana in just a few weeks each spring.

Coastal Louisiana has other attractions for the outdoor tourist, including the nation's largest area of marshlands, beautiful cypress swamps, large concentrations of fish at offshore oil and gas platforms for scuba diving, and wildlife such as alligators and porpoises everywhere. For those people that like to harvest some of this bounty, Louisiana offers what is easily the best duck and goose hunting in the U. S., and superb recreational fishing, both offshore and inshore.



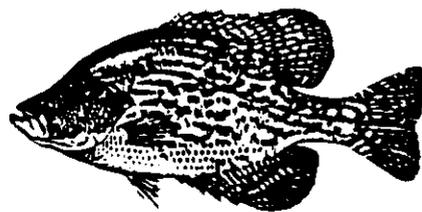
Developing tourism as a stable **part** of the coastal economy takes planning. I suspect very few Louisianians would like to see south Louisiana packed with miniature golf courses, amusement parks, gambling casinos, large hotels, condominiums, and seashell and souvenir shops. Additionally, a coastal economy too dependent on the tourism industry is just as shaky as one built mainly on oil and gas or any other single industry.

The greatest challenge facing coastal planners is how to develop tourism as part of integrated coastal management. Unplanned development may result in wetland loss and pollution which may destroy seafood, fish, and wildlife resources, which are what made south Louisiana attractive to tourists to begin with.

Source: *Year of the Ocean Discussion Papers. Coastal Tourism and Recreation. 1998. U. S. Department of Commerce.*

CRAPPIE POPULATIONS

Crappie, often called sac-a-lait in south Louisiana and white perch in north Louisiana, are a very popular freshwater gamefish in much of the United States. Wherever they are found, crappie populations go up and down noticeably, with good catches some years followed by years of very poor catches. In Louisiana, this cycle seems to be much more noticeable in man-made lakes and reservoirs than in rivers, the Atchafalaya Basin, or in freshwater marshes. But even in these areas a population cycle may be noted.



Biologists in Iowa have attempted to determine if environmental conditions may explain some of the variation. They towed a very small mesh net in 11,000 acre Rathbun Lake and compared their catches of larval (newly hatched) crappie against lake water levels, water clarity, temperature, wind, and bottom firmness. Like many fish, larval crappie are nearly free-floating in the water after hatching, before they grow enough to swim well.

The results of this investigation were very interesting. The two main environmental factors affecting the number of larval crappie were water levels and water clarity.

Almost without exception, high water levels in the lake during the spawning period resulted in high numbers of larval crappie. The only exceptions to this relationship were in years of low clarity (muddy) water. Larval crappies were **never** found when waters were very muddy during spawning season. The biologists felt that based on previous research, that the adult crappie abandoned their nests when muddy water created low light conditions on the bottom. They did note that actual suffocation of the eggs may also have occurred.

Temperature was an important, but not overriding factor. Crappie begin spawning when water temperatures reach 61 degrees F. A gradual steady temperature rise, with few ups and downs during spawning season seemed to produce the most spawning success. The rate of temperature rise did not seem to influence the length of the spawning season. Spawning lasted between 27 and 47 days during the 9 year study.

Wind played a small role in catches of larval crappie. Larger catches always occurred under low wind conditions, but many poor catches were also taken under low wind conditions. High catches never occurred under high wind conditions. This may be due to nest destruction in shallow spawning waters by wind-produced waves.

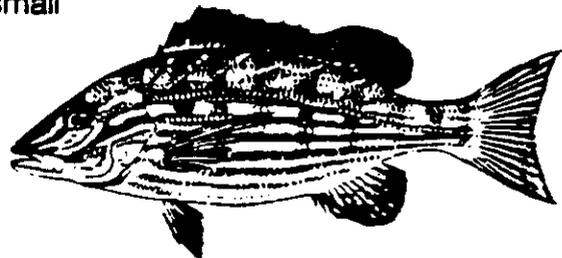
The final factor studied was firmness of the lake bottom. While it was a minor factor in larval crappie production, areas with very soft or very hard bottoms did seem to produce less larvae. Other studies have indicated that crappie prefer to spawn on hard clay, usually near some sort of water plants.

During the 9 years of the study, high catches of adult crappie by fishermen were made 2 to 4 years after a year of high larval crappie numbers.

Source: *Effect of Environmental Variables on Crappie Young, Year Class Strength, and the Sport Fishery.* Larry Mitzner, Iowa Department of Natural Resources. North American Journal of Fisheries Management 11:434-542,1991.

LANE SNAPPERS

The lane snapper, *Lutjanus synagris* is a small brightly colored snapper, rarely targeted but often caught by sports and commercial fishermen. It is pink or rose in coloration, with 8 to 10 yellow stripes running the length of the body. The largest one on record is only 5 pounds.



Little information on the biology of this fish exists. To fill in some of the gaps, biologists with the National Marine Fisheries Service conducted an age and growth study on this interesting little fish. A total of 826 lane snapper (45 from Texas, 471 from Louisiana, 310 from Florida) were obtained from hook and line fishermen. The fish were aged by counting the rings in their otoliths (ear bones) and their growth rates calculated.

They found that male lane snapper grew slightly faster and were larger at each age than females, however the oldest and largest fish were females. The oldest fish was a 17 year old female that was 20 inches long. The largest fish was a 27 inch female that was 11 years old.

In general, lane snappers grow very rapidly the first 5 to 7 years, reaching the minimum legal length limit at slightly over one year old. Lane snappers are managed with an 8-inch minimum size, commercially and recreationally. Lane snappers fall into the aggregate recreational bag limit of 20 fish, which also includes vermilion snappers, triggerfish and tilefish.

The researchers concluded that lane snappers are a long-lived fish that could be overfished if a large intensive fishery were developed for it in the Gulf. Currently the low level of fishing pressure on the species is not posing any biological problems.

Source: *Age, Growth, and Mortality of Lane Snapper from the Northern Gulf*. Allyn G. Johnson and others. Proceedings of the Forty-ninth Annual Conference, Southeastern Association of Fish and Wildlife Agencies. 1995.

DIDJA KNOW?

- * That in Louisiana, it is illegal on a boat 26 feet or less in length, to allow a person to sit on the gunwales or bow deck of a moving boat unless it has guard rails? This doesn't apply during anchoring, mooring, or docking.
- * That in Louisiana, it is illegal to possess an outboard motor with the serial numbers removed?
- * That when water skiing, that a second person, besides the operator, must be in the tow vessel to watch the skier?
- * That motor boats must keep to the starboard (right) side of narrow channels whenever safe and practicable?
- * That a boat operator can lose his automobile driving privileges for refusing to take an alcohol sobriety test or if he has a blood alcohol level of 0.1% or above when operating a boat?

* That it is illegal for a person under 13 years old to operate a personal watercraft (jet ski), or to allow someone under 13 to operate your personal watercraft?

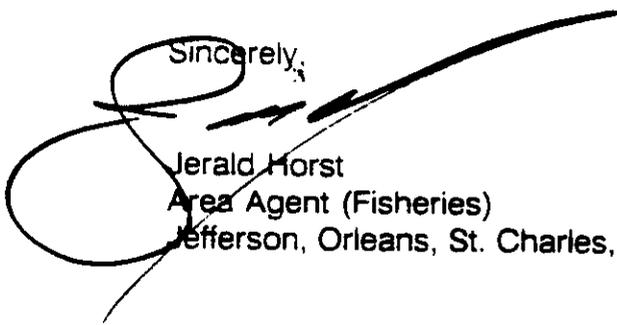
THE GUMBO POT
Crawfish Jambalaya

I recently had the pleasure of trying this dish prepared by Bebe Alario of Westwego. Jambalayas can be tricky because of the rice to water ratio. Too much water and the rice is soggy. Too little water and it's hard. Bebe tells me that using the electric rice cooker called for in this dish results in a perfect jambalaya every time. I think that you will enjoy it. I did! You may substitute shrimp for the crawfish, if you prefer to. This recipe originally comes from Thelma Muller of Westwego.

- | | | | |
|---|-----------------------------|----|---------------------------------------|
| 1 | lb crawfish tails | 1 | 4 oz can mushrooms, drained & chopped |
| 1 | can beef broth | 1 | stick margarine, melted |
| 1 | medium onion, chopped | 2½ | cups rice |
| 1 | medium bell pepper, chopped | | salt and pepper to taste |
| 1 | jalapeno pepper, chopped | | |

Place all the ingredients in an 8-10 cup electric rice cooker. Measure the rice in the rice cooker measuring cup. Do not add water. Taste for seasoning when the cooking cycle is done. Keep warm for 1/2 hour. Do not attempt to use a smaller rice cooker or double the size of the recipe. Serves 6

Sincerely,



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

**LOUISIANA COOPERATIVE EXTENSION SERVICE
LSU AGRICULTURAL CENTER
U.S. DEPARTMENT OF AGRICULTURE
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