

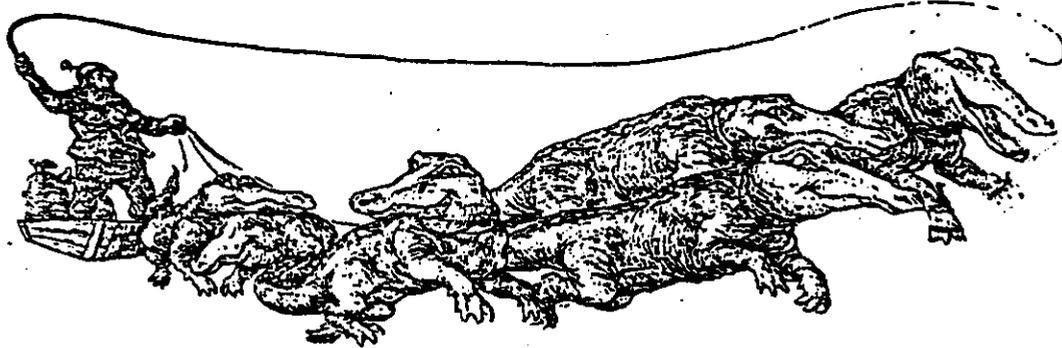


Louisiana State University  
**Agricultural Center**  
Louisiana Cooperative Extension Service

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## SEA GRANT PROGRAM



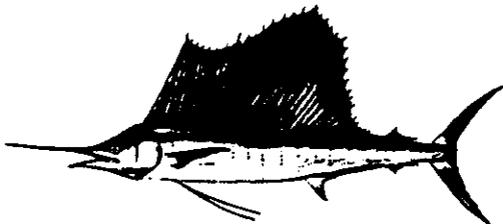
### LAGNIAPPE

#### RECORD BOOKS AND TAX EXEMPT FORMS

Over the years, many of you have used the Extension Service's *Commercial Fishermen's and Trapper's Record Books* to keep a record of your expenses and earnings. With the new year upon us, this is a good time to get your new record book.

Also available are sales tax exemption applications for commercial fishermen. If you would like an application or record book, call, write, or come by my office in Marrero.

#### BILLFISH MANAGEMENT PLAN CHANGES PROPOSED



Billfish in the Atlantic Ocean and Gulf of Mexico include, blue marlin, white marlin, sailfish, and longbill spearfish. Since 1988, these species have been managed by the National Marine Fisheries Service (NMFS) as gamefish, with no commercial harvest. In spite of having a bill, swordfish are not managed in the billfish group.

Almost all of the historical U. S. harvest of swordfish has been commercial.

In spite of management for 10 years, billfish stocks are still considered overfished. NMFS has proposed an amendment to the Billfish Management Plan. Several proposals in the amendment are of interest to recreational fishermen.

- Increase the minimum size permanently for blue marlin from 86 inches to 99 inches, for white marlin from 62 inches to 66 inches, and sailfish from 57 inches to 63 inches. All minimum sizes are lower jaw fork length, which is measured from the tip of the lower jaw to the fork in the tail.
- Allow fishermen to use dehooking devices to release billfish to increase their survival. Currently fishermen must cut the line to release the fish.
- Allow the use of only a single hook per bait or lure.
- Set a recreational landing limit of one billfish per vessel per trip.
- Require the release of all longbill spearfish.
- Require all charterboats fishing for billfish to have a permit, and keep and send in log books.
- Require charterboats that fish for billfish to carry an observer if they are selected to do so by NMFS.
- Require billfish fishing tournaments to notify NMFS 4 weeks before the event.

A copy of draft Amendment 1 to the Billfish Plan is available from the Highly Migratory Species Division, NMFS, 1215 East-West Hwy, Silver Spring, MD. 20910. Public comments may be submitted to this address or given at Amendment 1 Billfish Plan Public Hearings which will take place after the first of the year. For information on public hearing dates in Louisiana call (727) 570-5447.

## **ARTIFICIAL REEFS – ATTRACTION OR PRODUCTION**

Artificial reefs (including our famous offshore oil platforms) improve the catch of the average fisherman. That much fishermen and scientists can agree on. Most fishermen also assume that artificial reefs and offshore oil platforms produce fish. Scientist disagree on whether the areas produce fish or just attract fish produced over a larger area and concentrate them in one spot. This is an important issue because many important reef fish (such as red snapper) are considered overfished.

If artificial reefs only serve to attract these fish to one area that is easy for fishermen to find, they may actually increase overfishing. One researcher described artificial reefs as fishing tools in which habitat as well as bait is used to attract fish.

Tremendous public support for artificial reefs exists because fishermen visiting these sites often have high catch rates. Over 500 artificial reefs have been built in U. S.

coastal waters. Their construction is a highly visible fisheries management activity, usually with strong political support.

Artificial reef managers often assume that not enough hard-bottom habitat exists, and that building more of such habitat will increase reef fish populations such as snappers, groupers, and jacks. In theory, this new habitat increases feeding, nesting, and hiding areas for reef fish.

On the other hand, many reef fish ecologists believe that adult reef fish populations are limited by fishing pressure. They maintain that in overfished populations, not enough young fish are surviving to populate the hard-bottom habitat that exists, let alone populate new areas. Therefore, no more fish are produced by adding habitat, and concentrating the remaining fish may actually increase their depletion.

Two papers on the subject were printed in 1997. One involved a detailed review of the scientific literature on the subject of attraction versus production. The authors of this paper concluded that artificial reefs definitely increase fishing pressure on hard-bottom habitat. They stated that reef construction could **potentially** have negative effects on reef fish populations by increasing catch rates, increasing fishermen's access to unfished populations of a fish stock, and concentrating the stock that is already being fished on.

They maintained that there are few scientific studies that clearly show that artificial reefs increase regional fish production, and that research has not shown that reef fish numbers are limited by a lack of hard-bottom habitat. They concluded that both the positive and negative aspects of reef construction should be studied before adding new reefs to marine environments.

The authors of the other paper stated that artificial reefs were not a cure-all and that it cannot be assumed that more reefs equal more fish. They stated that the focus on building artificial reefs should be to imitate natural reefs as closely as possible to provide good habitat for the entire reef food web.

Source: *Do Artificial Reefs Increase Regional Fish Production? A Review of Existing Data.* G. D Grossman, G. P. Jones and W. Seamen Jr. *Artificial Reef Research: Is There More Than The Attraction Vs Production Issue?* J. A. Bohnsack, A. Ecklund and A. M. Szmant. Fisheries, Vol. 22 No. 4. April, 1997.

## **H. M. S. FISHERY PLAN RELEASED**

The National Marine Fisheries Service (NMFS) has released for public comment it's new Highly Migratory Species (HMS) Fishery Management Plan. This plan combines the

formerly separate shark and swordfish management plans and adds all species of tuna. Several significant changes are proposed in this new HMS plan.

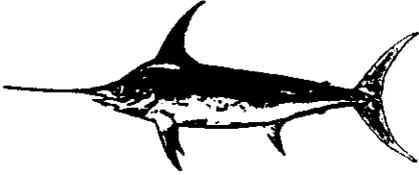
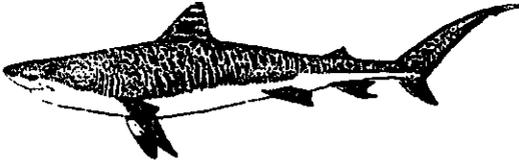
Each fishery in the plan is rated in two ways. First, is the fishery currently overfished? In other words, are there enough spawner fish in the water to reproduce the stock year after year. Second, is overfishing on the stock that exists now still occurring? If overfishing is occurring, the number of fish will be driven even lower than it is now, rather than staying the same or rebuilding itself.

FISHERY	CURRENTLY OVERFISHED	OVERFISHING OCCURRING
Swordfish	Yes, severely	Yes, severely
Bluefin Tuna	Yes, very severely	Yes
Bigeye Tuna	No, but nearly	Yes
Albacore Tuna	Unknown	No
Yellowfin Tuna	No	No, but nearly
Large Coastal Sharks	Yes, very severely	Yes, very severely
Small Coastal Sharks	No	No
Pelagic Sharks	Unknown	Unknown

The management plan is several hundred pages long and contains a large number of proposed changes. Listed below are the proposed changes most directly important to Louisiana recreational and commercial fisheries.

- Adopt a 10-year rebuilding plan for Atlantic bigeye tuna due to increased catches of young fish by non-U.S. vessels. U. S. fishermen would experience a 21% reduction in catch (about 697 metric tons). Bigeye tuna are an incidental part of Louisiana's commercial tuna catch (23,855 lbs in 1997) and an unknown part of the recreational catch.
- Set a recreational bag limit of 3 yellowfin tuna per person per day.
- Adopt a 10-year rebuilding plan for North Atlantic swordfish. This would decrease harvest levels by 27%.



- Begin counting discards of dead swordfish due to closed seasons, minimum sizes and other sources against the catch quota. This is expected to reduce commercial vessel earnings by nearly 12%. 
- Require the use of an electronic vessel monitoring system on all pelagic (tuna and swordfish) longline vessels that would broadcast the vessel's position at all times by global position system (GPS) signals. These systems are expected to cost \$3,000 - 7,000 unless they are leased, and \$2.50 per day to operate.
- Require pelagic longline gear be marked with the vessel ID number.
- Require pelagic longline operators to attend an educational workshop on how to increase survival of released species and how to avoid marine mammal hook-ups.
- Create a limited entry program for the commercial swordfish fishery.
- Add 15 sharks (dusky, bignose, Galapagos, night, Caribbean reef, narrowtooth, Caribbean sharpnose, smalltail, Atlantic angel, blue, longfin mako, bigeye thresher, sevengill, sixgill, and bigeye sixgill) to the protected list which already has 5 sharks (sand tiger, bigeye sand tiger, white, basking, and whale) on it. The sharks allowed for legal harvest in the Large Coastal Group would be sandbar, silky, blacktip, spinner, bull, tiger, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead, in the Small Coastal Group, Atlantic sharpnose, blacknose, finetooth, and bonnethead, and in the Pelagic Group, shortfin mako, thresher, porbeagle, and oceanic whitetip. 
- Divide the Large Coastal Group into two subgroups, Ridgeback (sandbar and silky sharks) and Non-ridgeback (all other Large Coastal Group sharks). Sets a minimum size of 4½ feet, fork length, for Ridgeback Subgroup species with an Atlantic quota of 642 metric tons, which is about an 8% reduction from 1997 landings. Also reduces the Non-ridgeback Subgroup species quota to 218 metric tons, which is 66% lower than 1997 landings.
- Set commercial shark fishery seasons with exact scheduled closing dates rather than monitoring the catch during the season and closing on short notice when harvests approach the quota. Any underharvest or overharvest during the season would be adjusted for in the next year's quota.

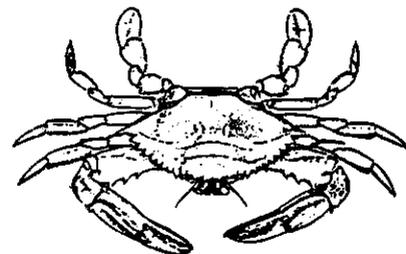
- Require recreational fishermen to release all Large Coastal Group and Small Coastal Group sharks that they catch, and create a recreational limit of 1 Pelagic Group shark per vessel per trip.
- Require that all sharks landed by recreational fishermen have their heads, tails and fins on them. Would allow sharks to be bled by a cut at the base of the tail.
- Begin counting discards of dead sharks and shark landings from state waters taken after federal waters close against yearly commercial shark quotas.
- Create a separate quota of a half of a million metric tons for the capture of sharks for public aquariums.
- Reduce the commercial Small Coastal Shark Group quota by 80% to 359 metric tons. This is 10% higher than 1997 landings were.
- Require charter and headboats to have an Annual Vessel Permit, and to keep and send in logbooks for all trips for tuna, swordfish or sharks.
- Require charter and headboats that fish for tuna, swordfish or sharks to carry an observer if they are selected to do so by NMFS.
- Require completion of all logbook forms before offloading (for one-day trips) or within 24 hours of each day's fishing activities (for multi-day trips).

A copy of the draft HMS proposal is available from the Highly Migratory Species Management Division, NMFS, 1315 East-West Hwy, Silver Spring, MD. 20910. Public comments may also be submitted to the same address or given at HMS Plan Public Hearings which will take place after the first of the year. For information on public hearing dates in Louisiana, call (727) 570-5447.

## **CHESAPEAKE BLUE CRABS**

Louisiana and the Chesapeake Bay states of Maryland and Virginia are the largest commercial producers of blue crabs in the United States. Louisiana crabmeat, live number 1 male crabs, and even softshell crabs, compete directly in the marketplace against Chesapeake Bay crab production. The size of the bay's production has a direct effect on Louisiana blue crab prices.

Now comes a report from the Chesapeake Biological Laboratory that blue crabs have been overfished for 5 years and that the size of the blue crab population may be dropping to new lows. In



July, the Virginia catch was below average and Maryland's catch hit a record low.

Not only is the size of the catch lower, the quality of the catch is also lower. The average size of crabs at harvest is getting smaller, as well as the catch per trap. The report states that crab fishing effort must be reduced to produce a better quality crab and lessen the chances of a long-term biological problem.

During a visit to Maryland this fall, I personally experienced the situation when I ordered a dozen large steamed crabs in a restaurant and was told that the price was \$60.

Source: *Save the Bay*. Fall, 1998. Chesapeake Bay Foundation.

### **SHRIMP SALT-BOX RESEARCH**

Salt-boxes are used by some shrimpers to separate bycatch from shrimp, especially during periods when smaller shrimp are being caught, as they are difficult to sort by hand. Salt-boxes are simply on-board tanks containing seawater, to which the shrimper adds food-grade salt in order to increase the specific gravity of the water.

Trawl catch is shoveled from the deck of the vessel into the tank where bycatch (mainly fish) floats and the shrimp sink. The bycatch is rapidly skimmed from the surface and dropped overboard and the shrimp are removed, washed and iced. Criticism is sometimes directed at the use of salt-boxes, mainly due to the belief that the hypersaline (very salty) water in the salt-box kills the bycatch.

To test this theory, Texas Parks and Wildlife Department biologists conducted research on the effects of salt-box use on the survival of speckled trout, redfish, croaker, southern flounder, and blue crabs. Salt-box salinities averaged about 67 parts per thousand (full-strength seawater is 35 parts per thousand). On average, bycatch remained in the salt-box about 1.7 minutes before being removed.

Of the species tested, redfish were most affected by salt-box exposure and blue crabs least. It took 17 minutes in the salt-box to kill 50% of the redfish and 67 minutes to do the same to blue crabs. Eight minutes in the salt-box produced no effect that could be observed on redfish and croaker.

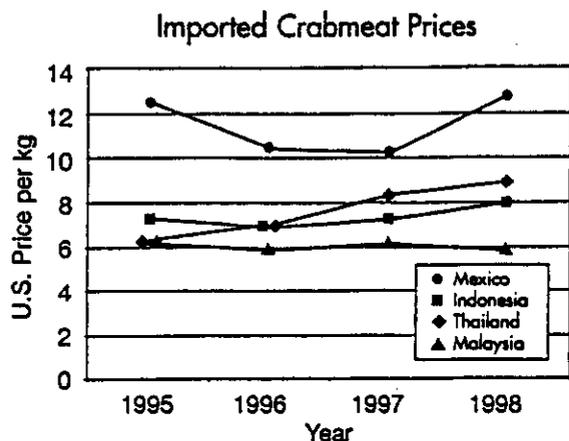
Because of this research, the biologists concluded that there was no statistically different survival of bycatch by fishermen that use or don't use salt-boxes. They suggest that survival of bycatch was most affected by the time required to cull the catch (total time on the deck) and the length of time the trawl was towed.

Source: *The Texas Shrimp Industry Salt-Box Catch Separation Procedure Effect on Bycatch Survival*. Robert L. Colura and Britt W. Bumguardner. Texas Parks and Wildlife Department. 1996.

## CRABMEAT IMPORTS

Crabmeat picking plants in the U. S. are increasingly competing with low-cost crabmeat imports from Asia and Central/South America. The crabmeat being imported is from species very similar to blue crabs.

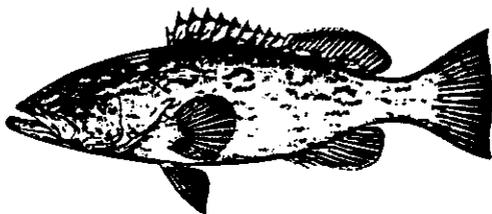
Crabmeat imports have historically been in four categories: Fresh/salted/dried/brine, Frozen, Air-tight containers (ATC), and other. ATC is the largest category to enter the United States, and has increased dramatically this year. From January to May, 1998, imports were 8.6 million pounds, a 75% increase over the 4.8 million pounds for the same period last year.



Prices for imports from selected countries are given at left in dollars per kilogram. To convert kilograms to pounds, simply divide the numbers on the left by 2.2. Southeast Asia (including Indonesia, Malaysia, and Thailand) is supplying the largest quantity at the lowest prices. Southeast Asian imports are also increasing much faster than Central/South America imports and presently make up 54% of warm water crabmeat imports.

Source: *Maryland Aquafarmer*. Fall 1998. Maryland Cooperative Extension Service.

## PUBLIC HEARING ON GAG GROUPER REGS.



The Gulf of Mexico Fishery Management Council will be holding a public hearing at 7pm on December 17 at the Larose Regional Park (2001 East 5<sup>th</sup> Street) in Larose on proposed regulation changes for gag and black groupers. Gag groupers, often incorrectly called black groupers in

Louisiana, are the most commonly caught grouper by Louisiana recreational fishermen and are one of the major species caught by commercial grouper fishermen.

The proposed changes are as follows:

- Increase the minimum size for both species from 20 to 24 inches.
- Set a 2 fish bag limit for gag as part of the current 5 fish recreational aggregate grouper limit.

- Set a possible annual harvest quota for gag with separate allocations for sport and commercial fishermen.
- Set a zero bag limit on gag for the captain and crew of charter vessels.
- Create a commercial trip limit between 500 and 2000 pounds per vessel.
- Set a closed season for gag harvest for either January-April or February-March each year.

## LOUISIANA'S FUR INDUSTRY

For many years, fur trapping and commercial fishing went hand-in-hand seasonally, providing year-around income for people living in Louisiana's coastal wetlands. For as long as records have been kept, Louisiana has led the nation in production of wild fur pelts.



During the early 1900's, the Louisiana fur industry involved over 20,000 trappers and 1,000 fur buyers and dealers. Muskrat was the main target, with harvest peaking at over 9 million pelts worth \$12 million in 1945. A larger South American rodent, the nutria escaped from captivity in Louisiana in 1940 and multiplied quickly, becoming a threat to marshlands and agriculture. This threat was not slowed until a market for nutria fur developed in Germany. Between 1962 and 1982, fur trappers harvested an average of 1.3 million nutria each year. Their population was not only controlled, but provided an important resource to trappers and landowners.

With the decline in the demand for nutria pelts after 1982, nutria again began to threaten marshlands. With their ability to reproduce quickly, large populations developed to the level that they could eat all of the available plants in the marsh down to the bare mud. (an "eatout"). While some of these damaged areas recovered, others became permanent open water, adding to the loss of coastal wetlands.

Most coastal landowners have only three sources of income from their property besides oil and gas leases. These are hunting leases, alligator leases and trapping leases. Income from these leases encourages landowners to manage their lands to prevent wetland loss. Income from trapping encourages also trappers to harvest the surplus animals from the land. Anything that lowers the demand and prices for fur pelts threatens both marshlands and the income of coastal people. These threats come from two sources – animal rights activities and changing market conditions.

### **Animal Rights Activities**

Animal rights groups generally are opposed to trapping, hunting, fishing, and any consumptive use of animals. These groups can be very effective at swaying public opinion. Many people underestimate the success and negative impacts these groups can have. Three hundred and fifty anti-trapping bills were introduced at federal, state and local levels between 1968 and 1982. During the late 1980's and early 1990's, activity has increased at the local level and decreased federally. Since 1973, Florida, Rhode Island, New Jersey, and Massachusetts have banned the use of leghold traps entirely and five other states have placed serious restrictions on their use. Arizona has lost trapping on all public lands, Massachusetts allows only box or cage traps, and Colorado passed regulations to restrict all trapping.

Anti-hunting regulations have also increased, especially in the northeastern U. S. During the late 1980's and the 1990's, more anti-hunting bills (especially bow hunting) were introduced into state legislatures than anti-trapping.

### **Changing Market Conditions**

The decline in fur demand in the northern European marketplace since the 1980's has had a devastating effect on prices paid to trappers. Now the fastest growing fur markets in the world are China and Russia, places where nutria are unknown to designers, manufacturers and consumers. Even in the U. S., nutria are not well known. Before 1988, nutria had never even been advertised in this country.

In order to tackle these problems, the 1986 Louisiana Legislature passed Act 455 creating the Louisiana Fur and Alligator Public Education and Marketing Fund. Money for this fund comes from \$20 of each \$25 trapping and alligator hunting license sold. The Louisiana Fur and Alligator Advisory Council makes recommendations for programs to be funded.

In the short time since its creation, the fund and the council have been effective. The largest nutria harvest in 10 years, over 327,000, was harvested last year. Over 50% of these were sold as a direct result of market development through this program. Pelt prices paid for eastern nutria averaged about \$4.90 in the 1997-98 season, which was up from \$4.00 in 1996-97, and \$2.15 in 1995-96.

Source: *Annual Report Fur and Alligator Advisory Council.* December, 1997.  
Louisiana Department of Wildlife and Fisheries.

## COMMERCIAL FISHERMEN'S SURVEY

*National Fisherman* magazine has recently completed a nationwide survey of hundreds of its readers. While some of the results were predictable, others were very surprising. What follows are some of the more interesting questions and the readers' answers.

- **When it comes to the future, what best describes your outlook on commercial fishing?**
  - 57% Fearful
  - 24% Very Fearful
  - 17% Positive
  - 1% Very Positive
  
- **Would you recommend commercial fishing as a future occupation for your son or daughter?**
  - 79% No
  - 21% Yes
  
- **Who/What do you consider the greatest threat to the longevity of your career in fishing?**
  - 31% National Marine Fishing Service (NMFS)
  - 28% Environmental activists
  - 26% Overfishing/overcapitalization
  - 20% Sportfishermen
  - 15% Competition in the market
  - 11% Other
  
- **How confident are you in the ability of the National Marine Fisheries Service to manage the country's fisheries?**
  - 49% Not confident
  - 33% Not confident at all
  - 18% Confident
  - 1% Very Confident
  
- **How much do you agree with the following statement? "Fisheries are managed in a manner that promotes maximum sustainability into the future."**
  - 47% Disagree
  - 24% Strongly disagree
  - 20% Agree
  - 3% Strongly agree

- **Compared to when you first began fishing, do you pay more or less attention to legislative matters affecting your fishery?**
  - 88% More
  - 10% Same
  - 2% Less
  
- **In your opinion, fishermen are portrayed in the media.....?**
  - 55% Not accurately
  - 33% Not accurately at all
  - 12% Accurately
  - 1% Very accurately
  
- **What method do you favor most for limiting/reducing fishing effort?**
  - 42% License limited entry
  - 18% Individual fishing quotas (IFQs)
  - 17% Buybacks
  - 14% Access should not be limited
  - 9% Other

*The regional spread on this last question was very interesting. License limited entry had the most support in the Gulf/South Atlantic region ( 51%). Individual fishing quotas were most supported in the Pacific region (23%). Buybacks were most favored in New England (20%), and least favored in the Gulf/South Atlantic (6%). Finally, the statement that access should not be limited received its strongest support (20%) in the Gulf/South Atlantic.*

Source: *National Fishermen*. December, 1998.

## **CHRISTMAS TREE PROJECT VOLUNTEERS NEEDED**

Volunteers and boats are once again needed for the Jefferson Parish Christmas Tree/Marsh Restoration Project. This marsh restoration project, now in its 9<sup>th</sup> year, uses donated Christmas trees to build sediment trapping fences that project and restore wetlands in the Barataria Basin.

Hundreds of volunteers are needed to bundle trees, which will be air-lifted by the Louisiana Army National Guard into pre-constructed cribs or an abandoned dead-end canal, at a later date. This activity does require some strength, and is open to individuals 15 years of age or older. Scheduled workdates for tree bundling are shown on the following page (alternate dates due to bad weather are in parentheses).

January 16, 1999 (January 17, 1999)  
 January 23, 1999 (January 24, 1999)  
 January 30, 1999 (January 31, 1999)  
 February 20, 1999 (February 21, 1999)

Volunteers and shallow draft boats are needed for the second phase of the project. In this phase loose trees will be taken from barges to small boats and transported to shoreline cribs. The scheduled day for placing trees in the marsh is March 6, 1999. In case of bad weather, March 7, 1999 will serve as the alternate date. To volunteer, call the Jefferson Parish Environmental Department at 736-6440.

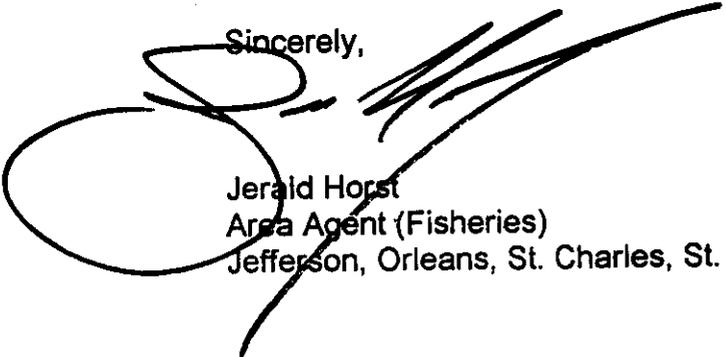
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**THE GUMBO POT**  
**Camp Fish Dish**

This recipe has its origin at a hunting camp. An afternoon fishing trip can produce any of a number of kinds of fish. It is good with almost any fish, bass, catfish, seatrout or redfish.

2	lb fish fillets, cut into chunks	1	8-oz can tomato sauce
	salt, pepper and lemon pepper	2	tbsp roux
½	cup margarine	1	bay leaf
3	cloves garlic, minced	½	cup chicken broth
1	large onion, chopped	¼	cup red wine
½	bell pepper, chopped	⅓	cup parsley, chopped
1	10-oz can chopped tomatoes with chilies	⅓	cup green onions chopped rice

Season fish with salt and pepper and chill for 2 hours. Melt margarine. Add garlic, onions and bell pepper. Saute until soft. Add tomatoes, roux, and bay leaf, and simmer for 15 minutes. Add broth and wine. Cook 30 minutes. Add fish and cook 30 minutes, adding parsley and green onions in the last 10 minutes. Serve over rice. Serves 6.

Sincerely,



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