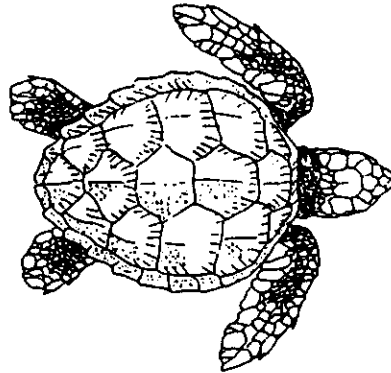




SEA GRANT PROGRAM



LAGNIAPPE

BANNER YEAR FOR KEMP'S RIDLEY SEA TURTLES

After a healthy increase in the number of Kemp's ridley sea turtle nests on Mexican nesting beaches in 1997, the number of nests made a huge 53% jump in 1998. This turtle nests almost exclusively on one main and several smaller beaches in Mexico, and its decline 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	1989	878
1979	954	1990	992
1980	868	1991	1155
1981	897	1992	1275
1982	750	1993	1184
1983	746	1994	1568
1984	798	1995	1938
1985	702	1996	2080
1986	744	1997	2387
1987	737	1998	3752
1988	842		

A total of 183,920 hatchling (baby) turtles were produced from the 1998 nests, which is a 23% increase over the 149,567 produced in 1997. The increase in hatchlings was lower than the increase in number of nests because of poor weather conditions on nesting grounds.

Also, 13 Kemp's ridley sea turtle nests were found on the South Padre Island area of the Texas coast, where head-started turtles have been released. At least 4 of the nests were produced by tagged head-start turtles.

This large number of nests means that the number of nesting female turtles is almost certainly above 3000 animals, and that we are well on the way toward the target number of 10,000 nesting females.

Source: Personal communication, Charlie Sanchez, U. S. Fish and Wildlife Service.

SEAFOOD CONSUMPTION SLIDING

Per capita seafood consumption is simply a measurement of the pounds of seafood eaten per person in the United States. Per capita consumption of seafoods dropped again in 1997 for the fourth straight year.

Top proteins	1990	1991	1992	1993	1994	1995	1996	1997	% Change
Beef/Veal	64.9	63.9	63.6	62.3	64.4	64.8	65.2	63.8	-1.6%
Pork	46.4	46.9	49.5	48.9	49.5	49.0	45.9	45.6	-1.7%
Chicken	42.5	44.3	46.7	48.5	49.3	48.8	49.8	50.9	+19.8%
Seafood	15.0	14.9	14.8	15.0	15.2	15.0	14.8	14.6	- 2.6%
Turkey	13.8	14.1	14.1	14.0	14.1	14.1	14.5	13.9	+0.7%

What gives? The United States economy is strong, consumer confidence in seafood is high, and the health benefits of eating seafood are being given good publicity by the press. Seafood industry analyst Howard Johnson, suggests several reasons in his recently released *1998 Annual Report to the United States Seafood Industry*.

- **Not enough seafood.** Although the supply of seafood in the United States is increasing slightly, it is not growing as fast as the nation's population. Simply put, there are less pounds available for each person.
- **High prices.** The consumer price index shows that seafood prices are rising much faster than prices for other proteins such as beef, chicken and turkey.
- **Population changes.** Seafood is most heavily eaten by middle-aged and older Americans. Consumption is down slightly there and younger people have not picked up seafood consumption enough to make up the difference.

- **Marketing is needed.** Unlike the beef and pork industries, the United States seafood industry has not put together a national marketing campaign to remind people to buy seafood.
- **Convenience.** Seafood has not found a place so far in the convenience food trend, such as take-out meals to eat at home.
- **Perceived value.** Consumers often incorrectly view seafood as hard to cook. They find it hard to pay higher prices for a product that they can't always count on coming out right.

Tuna again led the pack as the top seafood consumed in the United States. The biggest drop in consumption, however, was in canned seafood, which includes much of the tuna. The big gainer was shrimp, which set a new consumption record at 2.7 pounds per person. The United States' total supply of edible seafood products increased by 1.9%. United States landings experienced a 3% drop, but this was offset by a 5.8% increase in imports. Imports now account for 61% of all seafood consumed in the nation.

Source: *SeaFood Business*. Nov/Dec 1998

Top 10 Seafoods	Pounds
Tuna	3.10
Shrimp	2.70
Alaska Pollock	1.64
Salmon	1.30
Cod	1.06
Catfish	1.02
Clams	0.46
Crabs	0.42
Flounder/Sole	0.33
Halibut	0.29

WANTED: LUNKER BASS



Bayou state bass anglers are once again invited to participate in the Louisiana Lunker Bass Program (LLBP). Now in its second year, the program encourages any angler who reels in a 13-pound or greater largemouth bass in state waters to donate it to the Louisiana Department of Wildlife and Fisheries' (LDWF) Booker Fowler Fish Hatchery for spawning, exhibiting or research purposes. The program is open for donations from December 1, 1998 to April 30, 1999.

The LLBP was established in 1997 as a cooperative effort between LDWF, Southern Pride bass Club (SPBC) and the Association of Louisiana Bass Clubs (ALBC) to enhance and promote Louisiana's largemouth bass fisheries. The program was funded by proceeds from a SPBC and ALBC sponsored bass tournament donated to the Louisiana Wildlife and Fisheries Foundation with the specific request they be used to enhance Florida largemouth bass in the state's fish hatchery system.

Anglers who donate lunkers to the program will receive a free replica of their fish and certificate of appreciation from the LLBP. The donated bass will be housed, maintained and spawned at the Booker Fowler Fish Hatchery in Forest Hill, Louisiana. After spawning, donated lunkers will be moved to an exhibit aquarium located at the Booker Fowler Visitor Center. Finglerlings produced from lunker fish will be stocked back into the lake from where the parent came.

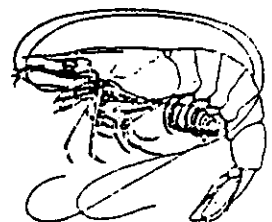
Fish will be accepted into the program by LDWF inland fisheries biologists after a determination of the lunker's ability to survive spawning. Qualifying fish will be transported by LDWF personnel to Booker Fowler Fish Hatchery. Possession of the fish must be transferred to designated LDWF representatives within 12 hours of capture. Fish must be alive and in good condition and legally caught. Anglers donating fish must sign a statement transferring all rights of use and ownership the lunker to the LDWF.

Anglers who catch qualifying fish should go to their closest contact point or call their nearest LDWF district fisheries coordinator. Following is a list of contact points and personnel:

LDWF District 1 Minden — James Seales 318/371-3050/3046
 LDWF District 2 Monroe — Mike Wood 318/343-4045/4046
 Caney Lake-Brown's Landing — 318/259-6649
 Caney lake - Caney Lake Marina — Terry 318/249-2665
 Caney Lake-Little Buck's Store — Donnie 318/249-4437
 LDWF District 3 Alexandria — David Byrd 318/487-5885
 Cleco Lake - Wilda Trading Post — Wayne Radisill 318/793-4595
 Toledo Bend - south end area - Toledo Bend Research Lab — Doug Adams 318/286-5881
 Toledo Bend - mid lake area — Toledo Tackle 318/256-5613
 Toledo Bent - mid lake area — Toledo Bend Resort 318/286-9257
 Toledo Bend - south end area — Buckeve Landing 318/586-7500
 LDWF District 4 Ferriday — Mike Ewing 318/757-4571
 Sportsman's Lodge — Jody martin 318/757-4381
 Lake Concordia — Lakeview Lodge - Allen Edgard 318/757-2267
 LDWF District 5 Lake Charles — Bobby Reed 318/491-2577
 LDWF District 6 Opelousas — Jody David 318/948-0255
 Opelousas - Cary's Sporting Goods — Mark 318/363-7650
 Opelousas — Joe's Tackle Mart 318/363-7650
 LDWF District 7 Baton Rouge — Tim Morrison 504/765-2336
 LDWF District 8 Lacombe — Howard Rogillio 504/882-5228
 LDWF District 9 New Iberia - Atchafalaya Basin — Mike Walker 318/373-0032
 Booker Fowler Fish Hatchery — Robert Gough 318/748-6914
 Operation Game Thief Hotline 1-800-442-2511.

SHRIMP IMPORTS

Following rule-making which required mandatory use of TEDs in the trawls of United States shrimpers, Congress tried to level the playing field by requiring that shrimp could not be imported from countries that didn't require their own shrimpers to use TEDs.



The law was appealed to the World Trade Organization (WTO) of which the United States is a member. The WTO ruled that the law violated the principles of free trade. Instead of defying the ruling, the United States has officially accepted it.

The law did not seem to have much impact even when in effect. During the first eight months of last year, shrimp imports were 429 million pounds, as compared to the 1994-97 average of 362 million pounds.

It remains to be seen if United States officials try another approach on the import issue.

REDFISH!

Louisiana fishermen may not realize how lucky they are to have such healthy stocks of redfish. While several stock assessments in a row have shown that redfish are plentiful enough to support an increase in the daily bag limit for Louisiana fishermen, other states are reducing their limits.

In late fall of last year, the state of South Carolina reduced the daily recreational limit from 5 fish per day to 1 per day. Studies in South Carolina showed the spawning population of redfish had dropped dramatically. Redfish are gamefish only in that state, so the decline had to be due to recreational overharvest or environmental changes, or a combination of both factors.

At about the same time, North Carolina also dropped its limit from 5 redfish to 1 between the size of 18 and 27 inches. They also prohibited keeping any redfish over 27 inches. Before the rule change, recreational fishermen were allowed to keep one large fish.

DEAD ZONE NEWS

The low oxygen (hypoxic) area in the Gulf of Mexico off of Louisiana has gained increasing attention in recent years. Near the end of last year, the Congressional Research Service delivered a report on marine dead zones to United States Congress and in turn Congress enacted legislation (with funding) to tackle the issue. Some of the highlights of the report are as follows:

- Hypoxia occurs at times in 21% to 43% of United States estuaries, more than half of the area of which is off of Louisiana's coast.
- Hypoxia is becoming more frequent and widespread.

- Hypoxia does occur naturally, but can be worsened by human activities. Both natural and human-influenced hypoxia occur when high nutrient (nitrogen and phosphorus) levels stimulate strong growths (blooms) of phytoplankton, the microscopic floating plants that are the basis of ocean food chains. When these blooms die back, they sink to the bottom and decay, removing oxygen from deeper waters. Salinity differences prevent these oxygen-poor waters from mixing with oxygen-rich surface waters.
- Human activities that can increase hypoxia include lawn and farm fertilizer runoff, animal feed lot runoff, sewage plant discharges, vehicle and power plant emissions, and other industrial sources.
- The Gulf of Mexico supports important commercial and recreational fisheries, bringing into Louisiana \$2.9 billion in retail sales and supporting almost 50,000 jobs.
- The specific effects of the gulf hypoxic zone on fisheries are not clear, but may include increasing fishing times and expenses, concentrating fishermen in other areas resulting in localized overfishing, habitat damage, possible decreased production, shellfish deaths, decreased fish growth, and localized fish kills.
- Reducing hypoxia may possibly take years or even decades.

In November, the United States Congress passed the "Harmful Algal Bloom and Hypoxia Research and Control Act of 1998". The act creates a task force of federal agencies which must deliver an assessment report on hypoxia in the gulf by May 30, 1999. The act also provides that the President along with state governors shall by March 30, 2000 prepare for Congress a plan to solve the problems of hypoxia. A total of \$52,250,000 was authorized to be appropriated over the next 3 years for the prevention, reduction and control of harmful algal blooms and hypoxia.

Source: *Marine Dead Zones: Understanding the Problem*. John R. Dandelski and Eugene H. Buck. C. R. S. Report for Congress. November 23, 1998.

CRAB TRAP LICENSE MORATORIUM EXPIRES

Effective January 1, 1999, commercial crab trap licenses can again be purchased by anyone without any qualifications. The 1995 Regular Session of the Louisiana Legislature had put a crab trap license moratorium into effect during the years 1996, 1997, and 1998. During that period of time, only people who had held such a license during at least one year of the 1993-1995 period could buy the license. The 1997 legislature considered a bill creating a permanent limited entry program for crab trap licenses, but the

bill did not pass. As the moratorium was not extended, it ended December 31, 1998, effectively opening license sales to anyone.

BYCATCH REDUCTION DEVICES

The National Marine Fisheries Service has filed an extension of an interim (temporary) rule concerning bycatch reduction devices (BRDs) for shrimp trawls in federal waters. The rule will be in effect until May 15, 1999.

Provisions include the following:

- (1) **For the Fisheye (in the Gulf of Mexico only) and Gulf fisheye BRDs**, prohibit any part of the lazy line attachment system (any mechanism, such as elephant ears or choker straps, used to attach the lazy line to the cod end) from overlapping, and thus obstructing the fisheye escape opening. This will help to ensure effective bycatch reduction.
- (2) **For the Jones-Davis BRD**, allow alternative methods for constructing the 24-inch hoop and the funnel and escape openings, thereby providing fishermen additional flexibility in complying with the BRD requirement.

Requests for copies of construction and installation instructions for the Jones-Davis fisheye, and Gulf fisheye BRDs should be addressed to the Chief, Harvesting Systems Division, Mississippi laboratories, Southeast Fisheries Science Center, NMFS, P.O. Drawer 1207, Pascagoula, MS 39568-1207. Phone 228/762-4591, Fax: 228/769-9200.

CHARTER BOAT LIMITED ENTRY CONSIDERED

The Gulf of Mexico Fishery Management Council has made a significant move toward considering limiting entry into recreational-for-hire (charter and headboat) fisheries in federal waters. The two fisheries being considered are reef fish, which includes snappers, and coastal migratory pelagic fish, which includes mackerels.

In both the red snapper and king mackerel fisheries, the recreational sector, which includes charter boats, has frequently gone over its quota. The usual method of controlling recreational overfishing is a reduction in daily bag limits. However, when reduced below a certain level, bag limit reductions have very negative impacts on charter fisheries, as people stop chartering the vessels.

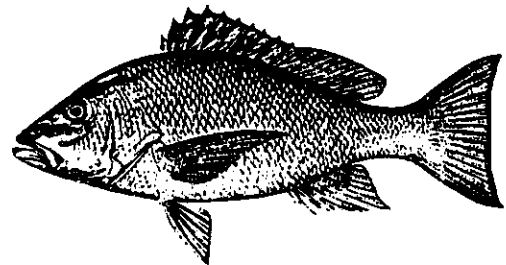
This has caused the council to look at other methods of managing charter and headboat businesses, such as limited entry.

If a limited entry program is considered, the council is considering November 18, 1998 as a possible control date. Anyone entering the fishery after that date may not be assured of being able to stay in the fishery under limited entry.

Control dates are used to discourage speculators from jumping in at the last minute to establish a record of being in the fishery and possibly being able to qualify for a permit.

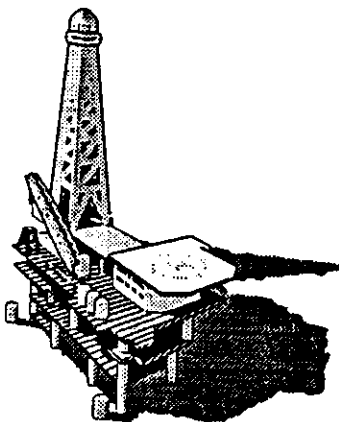
RED SNAPPER AND PLATFORM REMOVALS

Red snapper management has probably been the most heated fisheries issue (besides TEDs and sea turtles) in the history of the Gulf of Mexico. They are still officially classified as severely overfished, and every party involved, recreational fishermen, charter fishermen, commercial snapper fishermen, shrimp trawlers, and biologists debate who is most at fault. Recreational and commercial snapper seasons have been closed, daily limits have been reduced, and shrimp trawlers in federal waters have had to install bycatch reduction devices (BRDs) in their trawls.



Another source of red snapper mortality (deaths) that periodically comes up is the use of explosives to remove offshore oil and gas production platforms. Red snapper heavily use these platforms as artificial reef habitat.

When oil and gas platforms reach the end of their productive life, law requires that they be removed. Typically, the platform deck above the waterline is cut first. Plastic explosives are then lowered down the hollow metal legs of the platform to at least 15 feet below the mudline. When the charges are set off, they cut the legs. Presently, over 4000 platforms are in place in the Gulf of Mexico, mostly offshore of Louisiana and upper Texas. About 100 per year are being removed, two-thirds of them with explosives.



In an effort to determine the effects of explosive platform removal on fish, scientists with the Galveston Laboratory of the National Marine Fisheries Service studied 8 platform removals between 1993 and 1998. The platforms studied were in waters between 45 and 105 feet deep, and were located between the Mississippi River Delta and the Louisiana/Texas border.

One part of the study focused on determining how many and what species of fish were killed with explosive removals. At the platforms in the study, all fish that floated after an explosion were picked up from boats using dip nets. Dead fish

that sank to the bottom were sampled by diver surveys out to 110 feet from the platform.

The number of fish killed ranged from an estimated low of 1000-1900 at the 105 foot deep site to a high estimate of 4700-6000 at a 58 foot deep site. The average per structure was 3125. At the 8 sites, four species made up 89% of the kill: spadefish (41%), red snapper (18%), blue runner (17%), and sheepshead (14%). No red snapper were killed at the shallowest (45 ft) site. The highest red snapper kill was 1194, and the average was 539.

If all 100 removals per year used explosives and this is multiplied by the average fish kill for all species of 3125 per removal, a total of 312,500 fish of all species are killed per year by removals. While the number sounds large, it is a fraction of a percent of what is taken by hook and line fishermen and trawls.

The second part of the study was an attempt to determine what percentage of the red snapper present at each platform were killed by explosive removals. To do this, the biologists caught and tagged snappers before the explosives were set off. After the explosions, the dead fish were gathered and counted, and the number of tagged snapper were compared to the number of untagged snapper.

Enough snappers were tagged at 6 removal sites from which to draw conclusions. The percentages of originally tagged snapper found dead at the 6 sites were 73%, 66%, 90%, 61%, 57%, and 71%. As high as these were, the actual rates may even have been higher, since some of the tagged fish certainly died from the handling and tagging procedure and disappeared before the explosives were set off. About 67% of the dead red snapper recovered were under 15 inches, with the largest size category, by far, being 10-15 inches.

There were some limitations to the study. No platform removals were studied in waters deeper than 105 feet. Additionally, all 8 removals were made between June and September. Winter and spring studies were not made.

Source: *Fisheries Impacts from Underwater Explosions*. Gregg Gitschlag. Presented at Minerals Management Service Information Transfer Meeting. December, 1998.

FISH RIGHTS?

It is very easy to think of the animal rights movement as taking place in far off large northern cities or something that affects only hunters or maybe farmers. The following letter to the editor appeared in the November 18, 1998 *Advocate* Newspaper in Baton Rouge. Since many of you do not receive this paper, I've taken the liberty of printing it

here. PLEASE NOTE THAT THESE ARE NOT MY WORDS OR BELIEFS BUT ONLY PRINTED HERE FOR YOUR INFORMATION.

Sentiment About Fish Sentience

Please allow me to respond to your news item about PETA's request that General Mills sink its plans to feature bass fisherman Denny Brauer on Wheaties cereal boxes this fall.

It seems ridiculous to have to remind anglers, but tricking small animals into impaling themselves on hooks and then ripping them from their homes is hardly "sporting."

Fish, like all animals, can feel pain. According to Dr. Donald Broom, animal welfare adviser to the British government, "The scientific literature is quite clear. Anatomically, physiologically and biologically, the pain system in fish is virtually the same as in birds and mammals. In animal welfare terms you have to put fishing into the same category as hunting."

Adds Dr. Austin Williams, a U. S. National Marine Fisheries Service zoologist, fish "are sentient organisms, so of course they feel pain."

And even catch-and-release advocates aren't off the hook. A recent study by the Oklahoma Department of Wildlife Conservation found that up to 43 percent of fish die after being hooked and released.

Angling doesn't just hurt fish, either. Every year anglers leave behind a trail of tackle victims that includes millions of birds, turtles and other animals that suffer debilitating injuries after swallowing fishhooks or becoming entangled in fishing line.

Wildlife rehabilitators say discarded fishing tackle is one of the greatest threats to aquatic animals.

Fishing is not a harmless pastime.

That's why PETA urged General Mills to use the Wheaties box to honor someone who demonstrates true sportsmanship, rather than cruelty to animals.

Paula Moore, staff writer
PETA
501 Front St.
Norfolk, VA

JUNK SCIENCE

There is no doubt that Americans have become conditioned to negatively react to many issues — chemical use, environmental concerns (including overfishing), food safety, and many other topics. Misinformation can be cleverly packaged as being scientifically valid by interest groups trying to motivate the public to take action on an issue.

Recently a ninth grade student, Nathan Zohner, of Eagle Rock Junior High School in Idaho Falls, Idaho did a prize-winning science project entitled "How Gullible Are We?" For his project he asked people to sign a petition demanding strict control or elimination of the chemical "dihydrogen monoxide".

He stated that the reasons for the action were that the chemical 1) could cause excessive sweating and vomiting in humans, 2) is a major part of acid rain, 3) can kill humans if inhaled, 4) can cause severe burns in its gaseous state, 5) contributes to erosion, 6) decreases the effectiveness of car brakes, and 7) has been found in the tumors of cancer patients.

He asked 50 people if they supported a ban of the chemical. Forty-three said yes. To their credit, 6 were undecided. Only one said no. He knew that dihydrogen monoxide is also known by the common name of WATER.

Source: *Capitol Press* newspaper. Salem, Oregon

THE GUMBO POT Oyster Rockefeller Bisque

This month's recipe comes to us from Al Sunseri of P & J Oyster Company in New Orleans. I tasted this elegant dish at a Christmas party in December and insisted that he share the recipe. I hope that you will enjoy it as much as I did.

2 stalks celery	5 doz. oysters
¼ head iceberg lettuce	¼ tsp. cayenne pepper
2 boxes frozen spinach leaves (thawed)	½ cup Herbsaint (or Pernod) liqueur
3 green onions	¾ cup fresh grated romano cheese
2 toes garlic	2 pints half & half
½ stick butter	salt to taste

Chop celery, lettuce, spinach, green onions, and garlic in a food processor. Saute chopped ingredients in butter in a large skillet, about 10 minutes over a low flame, stirring occasionally. Meanwhile, saute oysters over low heat until mantles curl, about 4 minutes. Pour the liquid produced from sauteing oysters and cayenne into sauteed seasonings and stir. Chop 2 dozen oysters in processor, then put into sauteed seasonings. Stir in Herbsaint, romano, and half & half. Heat on a medium-low flame for about 15 minutes, stirring occasionally. Salt to taste. Add remaining whole oysters before serving. Makes 8 large servings.

Sincerely,

Jerald Horst

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