Louisiana State University
Agricultural Center
Louisiana Cooperative Extension Service

March 3, 1998
Volume 22, No. 3

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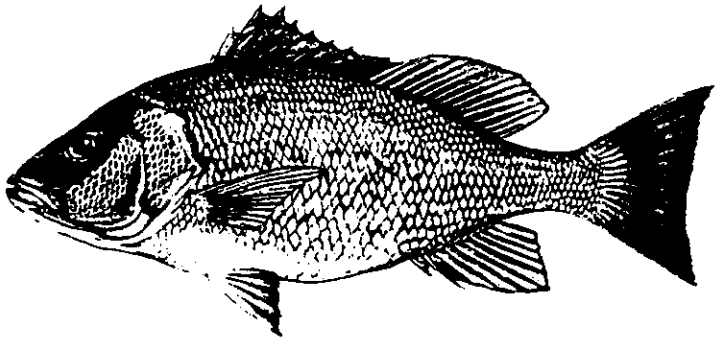
SEA GRANT PROGRAM



LAGNIAPPE

RED SNAPPER DILEMMA

The recreational red snapper fishery in the Gulf of Mexico closed November 28, 1997, for the first time ever. It affected hundreds of small businesses in the form of charter boats, head boats and support industries. The closure came as a surprise, resulting in anger and dismay by the recreational fishing industry. How and why did the closure occur?

Red snapper were first regulated under a fishery management plan in 1984 when the Gulf of Mexico Fishery Management Council set a thirteen inch minimum length limit. By 1988, computer models provided sufficient data to suggest that red snapper were severely overfished.

In 1990, the Council set a goal to rebuild the spawning potential of the snapper stock to twenty percent of its unfished condition by 2000. The Council imposed a seven fish recreational bag limit and a 3.1 million pound commercial quota. Later, the Council adjusted quotas to 3.06 million pounds for the commercial fishery, 2.94 million pounds for the recreational fishery, and lengthened the rebuilding time to 2019. Once the commercial fishery reached its quota, regulations required its closure, but the recreational fishery was not subject to a closure.

The second year the commercial quota was in place, it was reached in 53 days and the fishery closed. Despite attempts to lengthen the commercial season through trip

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limits and split quotas, the quotas were met in short time periods. Meanwhile, the recreational fishery was exceeding its quota by 100,000 to nearly 3 million pounds from 1991 to 1994. As a result, the bag limit was reduced to five fish in 1995; but the recreational fishery still exceeded the quota by 1.2 million pounds. This problem appeared to be solved when the recreational quota was increased to 4.47 million pounds in 1996 and the fishery did not meet this limit.

Reports from recreational fishermen indicated that fish were abundant and the commercial sector was readily fulfilling its quota. But, in the halls of Congress, the Magnuson Fishery Conservation and Management Act was undergoing a scheduled reauthorization and numerous changes. It included a provision requiring the Gulf of Mexico recreational snapper fishery to close when it reached its quota. Other changes that could effect the red snapper fishery were requirements that redefined overfishing as the rate of fishing mortality that produces a maximum sustained yield on a continuing basis. It also required rebuilding times to be ten years or less, unless circumstances indicated otherwise.

In November, the recreational red snapper fishery closed when it reached its quota. As late as October, however, National Marine Fisheries Service scientists were telling the charter boat industry that there was little chance that the fishery would reach its quota. These inaccurate projections have focused debate on the methods of measuring the recreational catch.

The current method is to use data from the Marine Recreational Fishery Statistical Survey, Head Boat Survey, and the Texas Parks and Wildlife Department Survey. These surveys were not designed to specifically measure the red snapper catch, but are long standing surveys that have been adapted to determine when the quota is reached. Recreational interests are disputing the accuracy and precision of the surveys as they relate to closing the fishery.

While concern is high over this first ever closure, greater problems loom on the horizon. The red snapper fishery opened again on January 1, 1998. Recreational fishermen are back in force catching fish. In all likelihood, the average fish will be a little larger than in 1997. Since the quota is measured in pounds, it will take less fish to reach the quota than in 1997 and the fishery could close earlier than late November. Furthermore, the Council is currently debating whether to lower the quota based on recent reviews of the red snapper model. Lowering the quota would result in lower bag limits, earlier closures, or both.

Perhaps even more troublesome for recreational and commercial interests are the other requirements in the Magnuson-Stevens Fishery Conservation and Management Act and its interpretation by the National Marine Fisheries Service. The Gulf Council has been advised by its Reef Fish Stock Assessment Panel that in order to meet the new definition of overfishing, the recreational and commercial quotas would have to be reduced from

their current levels, or bycatch reduced beyond levels that are currently achievable. The Panel has further advised that it is biologically impossible to achieve the new conservation standard within the recommended ten years even if all fishing for red snapper were stopped and the bycatch of red snapper completely eliminated.

Extreme solutions such as the recreational fishery closure are representative of the Gulf Council's dilemma. The new Magnuson-Stevens Act requires the Council to take a conservative approach in managing red snapper. The Council must rely on the computer model which is unyielding in its estimate of the status of red snapper and the course necessary to rebuild the stocks.

On the other hand, fishermen insist that the old management regime works fine. By their account, red snapper are more plentiful and larger than 10 or 15 years ago and further restrictions unnecessarily pose a serious threat to the sportfishing industry. Despite these observations and concerns, the Council will have little room to maneuver and will have to use the computer data as the best available data and comply with provisions of the Magnuson-Stevens Act.

Source: *Recreational Red Snapper Fishery Closed.* Richard K. Wallace. Water Log. Vol.17:4. Mississippi-Alabama Sea Grant Consortium.

LEATHERBACK SEA TURTLE NESTS UP

Record numbers of nesting leatherback sea turtles have been found at the Sandy Point National Wildlife Refuge in the U. S. Virgin Islands and two of the most important nesting beaches in Puerto Rico. Since 1981, between 18 and 55 female leatherback turtles have nested in these areas each season. Since February, 1997, more than 100 females have been tagged nesting. Leatherback sea turtles are the largest and second-most endangered sea turtle behind the kemp's ridley sea turtle.

Source: *Endangered Species Bulletin. Vol. XXII No. 4.* U. S. Department of Interior.

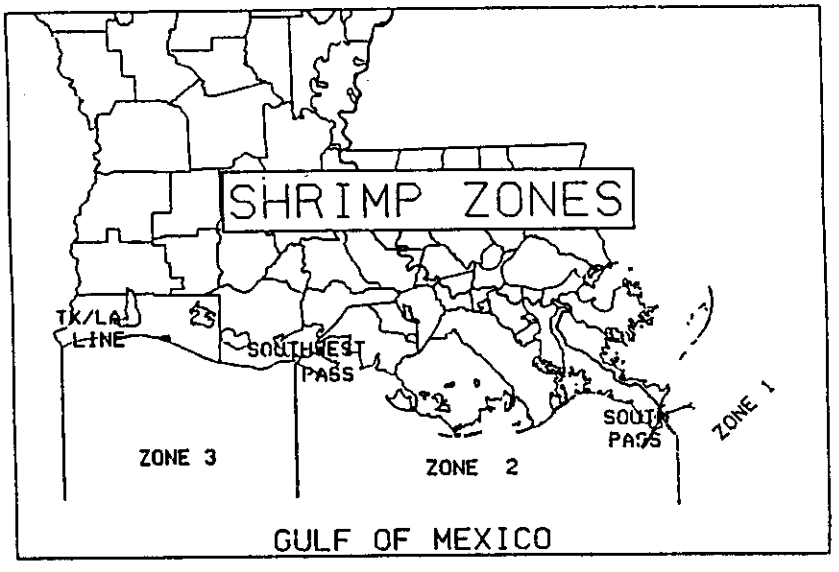
FINFISH BYCATCH IN TRAWLS

Bycatch in fisheries is an issue that fisheries managers are increasingly focusing on in the United States. Bycatch exists in all fisheries, even recreational ones, because almost no gear is exclusive enough to catch only what the fishermen is fishing for.

In Louisiana, the fishery that has received the most interest concerning bycatch is the shrimp trawl fishery. A common belief exists that shrimp trawls capture large amounts of fish desirable to sports fishermen such as speckled trout and redfish.

Recently two researchers from Louisiana State University and Louisiana Universities Marine Consortium (LUMCON) looked at 21 years of trawling data collected by the

Louisiana Department of Wildlife and Fisheries (LDWF). Among other things, they noted the relative abundance of the non-target species captured in LDWF trawl samples.



LDWF conducts regular monitoring at 18 stations in all three shrimp management zones of the state using a standard 16 foot shrimp trawl. It is important to note that this data is "fisheries independent" data which means that it was gathered by biologists from their own nets. Biologists do not always fish in the same place or the same way that commercial fishermen do, so the results of their trawl tows may be somewhat different than if the catch of commercial fishermen were sampled. This data does still, however, give a good starting point on determining what shrimp trawls capture.

In all three zones, the two most common bycatch species captured were the bay anchovy (47.5% of the catch) and the Atlantic croaker (18.2%). Bay anchovies are small (under 4 inches) silvery fish with large mouths. They are very common in Louisiana estuaries. A list of the ten most common non-shrimp species captured in each zone over the 21 year study is given on the next two pages.

NEW ENGLAND BOAT BUYOUT COMPLETED

The final boat in the $24 million federal boat buyout has been retired from the New England goundfish fishery. This fishery, consisting, mostly of cod, haddock, and flounder, has been in a state of near collapse.

A total of 78 vessels were bought out. These vessels produced 22% of the value of the entire fishery. Of the vessels, 53 were homeported in Massachusetts, 21 in Maine, two in New Hampshire, and one each in Rhode Island and New York.

To prevent these vessels from moving into other fisheries, causing problems in them, the vessels had to be scrapped, legally sunk, or put to other non-fishing use. Of the 78 vessels bought out, 61 were scrapped, 7 sunk, 6 are used for research or education, and 4 for harbor patrol or humanitarian purposes.

The purpose of this program was to assist fishermen financially impacted by the groundfish crisis and to aid in long-term recovery of the fishery. In addition to the buyout program, Congress provided fishing industry grants, loans, a subsidy for health insurance for fishing families, and the establishment of fishing family assistance centers.

Our neighboring state of Texas has completed its second year of a boat buyback program to reduce fishing pressure in its inshore shrimp fishery. This program is funded by the shrimping industry itself.

RECREATIONAL FISH MANAGEMENT GOALS

I am often asked why Louisiana does not manage speckled trout and redfish for a larger-sized fish. It is possible, within limits, to manage for larger fish. This can be done by lowering bag limits and/or increasing minimum legal sizes. What can't be done is to manage both for more harvest in numbers of fish **and at the same time** manage for large fish. A 1993 survey of recreational saltwater fishermen in Louisiana posed this very question to anglers. Their responses were interesting.

When asked what their most-preferred species of fish was, 56.1% said speckled trout and 36.2% said redfish. When asked their second most-preferred species, the answers were the same fish, but in reversed order, redfish 55.6% and speckled trout 34.0%. Flounder was easily the third most-preferred fish at 33.8%.

The anglers were then asked if they had a preference for current management, management for more, smaller fish, or management for fewer, larger fish. The table below shows the results by species.

Species	Current Regulations	More, Smaller Fish	Fewer, Larger Fish
Speckled Trout	75.1%	15.9%	9.0%
Redfish	64.3%	28.5%	7.1%
Flounder	82.5%	7.3%	10.2%
Black Drum	73.9%	16.2%	9.8%

The results are pretty clear. Most Louisiana fishermen prefer current management, and of the ones that prefer a change, most prefer more, smaller fish over fewer, larger fish. The only exception is flounder, which had more responses for fewer, larger fish.

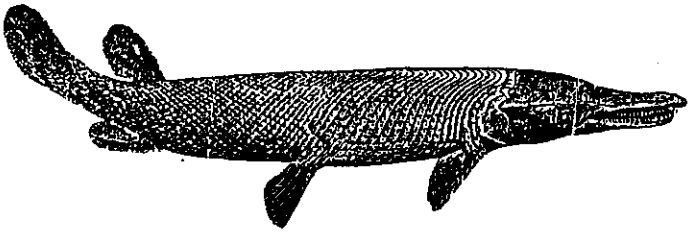
A total of 545 anglers from 44 parishes responded to the survey. Jefferson Parish had the largest number of respondents (20.4%), followed by East Baton Rouge (8.8%), Terrebonne (7.5%), Orleans (7.3%), Calcasieu (6.6%), Lafourche (6.4%), and St. Tammany (6.4%).

Source: *1993 Survey of Louisiana Saltwater Anglers.* William E. Kelso and others. School of Forestry, Wildlife, and Fisheries, LSU Agricultural Center. 1994

FEDS SET UP HOTLINE

Fisheries violations that occur in federal waters can be reported immediately by calling the NOAA Fisheries Enforcement Hotline, 1-800-853-1964. Since most fishing boats carry either radio equipment that can access telephone lines or cell phones, this is a convenience. The number is manned 7 days per week, 24 hours per day.

ALLIGATOR GAR FOOD HABITS



Alligator gar are large (sometimes well over 200 pounds), fish-eating predators found throughout Louisiana's freshwater habitats and even the state's brackish marshes. One look at the gar's mouthful of needle-sharp teeth is often enough to convince fishermen that they are fish-eating machines that can damage sport fish populations.

Texas biologists did a food habits study on this fish in Sam Rayburn Reservoir to see just what they do eat. During a two month period in September and October they caught 209 alligator gar with gill nets and jug lines. The gar ranged in weight from 18 pounds to 156 pounds.

While most of their stomachs (126) were empty, enough had food in them to get a picture of their diet. The proportion of food items by species is listed below:

SPECIES	% OF TOTAL FOOD ITEMS
Gizzard shad	26.4%
Channel catfish	14.9%
Freshwater drum (gaspergou)	12.6%
Bluegill,redear, and goggleye sunfish	7.9%
Spotted sucker	6.8%
White bass (barfish)	4.5%
Largemouth bass	3.4%
Spotted gar	3.4%
Crappie (sac-au-lait)	2.2%
Lake chubsucker	2.2%
Carp	1.1%

The study also showed that gar can be scavengers, as the carcasses of 7 crappie discarded by fishermen after cleaning were found in their stomachs. Other items found included 2 coots, 11 fish hooks, 1 artificial lure and 1 plastic bag.

Source: *Food Selection of Alligator Gar and Longnose Gar in a Texas Reservoir.* Edgar P. Seidensticker. Texas Parks and Wildlife Department. Proceedings of the Forty-first Annual Conference of Southeastern Fish and Wildlife Agencies. 1988

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THE GUMBO POT

This month's recipe is not only delicious, it is quick and easy. You'll be sitting down to eat a half hour after getting home. The parmesan cheese and onion soup mix blend well and season the dish wonderfully without salt or pepper.

Busy Day Fish

2	pounds fish fillets	2	tbsp grated parmesan cheese
1	cup sour cream	1	tbsp fresh chopped parsley
2	tbsp dry onion soup mix	¼	tsp paprika
1	cup fine dry bread crumbs	¼	cup cooking oil

Wash fillets and pat dry with paper towels. Combine sour cream and onion soup mix. In another bowl, combine bread crumbs, parmesan cheese, parsley, and paprika. Dip fish in sour cream mix to coat generously (use all of sour cream mixture) and roll in bread crumb mixture. Place fish in a single layer in a baking dish. Dribble cooking oil over fish. **Preheat** oven to 500 degrees. Bake for 12 to 15 minutes or until fish flakes with a fork. Serves 4.

Sincerely,

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