

Lagniappe

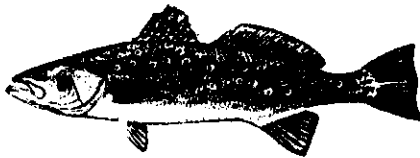


EXTENSION PROGRAMS
Agriculture and Forestry
Community Leadership
Economic Development
Environmental Sciences
Family and Consumer Sciences
4-H Youth Development
Natural Resources

December 3, 2001 Volume 25, No. 12

MANAGING FOR TROPHY TROUT

In October, the Texas Parks and Wildlife Department (TPW) issued a news release announcing that TPW biologists are studying the possibility of management changes that may produce more trophy-size speckled trout in Texas. TPW coastal fisheries director Hal Osburn said that their trout population is currently in excellent shape. Coastwide trout populations are 50% greater than in the early 1980s and the average trout caught has doubled in size from 1 to 2 pounds over the last two decades.



But, he cautions, some things are changing. Fishing pressure and catches are increasing, especially by anglers using live bait, resulting in fewer trout living long enough to grow to trophy sizes. Half of all private boat trips and three-fourths of all guided trips along the Texas coast currently target speckled trout. Guide numbers have tripled since the early 1980s. Osburn concludes "Thus, overall trout abundance is increasing, but trout life expectancy is declining. Trout are not reaching old age as large, trophy trout in the same proportion as they once did." Currently, only 5% of Texas fishing trips result in a 24-inch (5 lb) trout, and less than 2% result in one trout per angler over 26 inches long. Fishermen on guided trips are twice as likely to catch a 26-inch plus fish than those on private boats.

TPW surveys of trout fishermen indicate strong support for a maximum size limit, as long as at least one trophy fish above that size limit can be kept each day. Another option would be to reduce the current bag limit of 10 per day. Currently, 92% of private boat anglers and 76% of guided anglers that catch any fish, catch 6 or less trout per trip.

Also under consideration is raising the minimum size limit from 15 inches to 16 inches. A 16-inch trout is 27% heavier than a 15-inch trout and according to Osburn, a trout can grow the extra inch in 3 months. A final suggestion is to restrict the bag limit on guided trips to only paying customers or perhaps to limit the guide to one fish per day. Such restrictions on guides would reduce the speckled trout harvest by 10%.

Some Louisiana fishermen have also expressed an interest in management for larger speckled trout, especially in western Louisiana. At a July seminar held in Lake Charles by LSU AgCenter Marine Advisor Kevin Savoie, fishermen learned that management for large trout would have some costs, however. In Louisiana, speckled trout are managed with a 12-inch minimum size limit. Male trout grow slower and don't live as long as females. Males don't reach 14 inches long until 3 or 4 years old. Few males live over 5. Increasing the minimum size would provide only limited access to the male half of the population and fishermen would lose much of the harvest of males.

A maximum size limit would certainly protect some large females from harvest. However, it must be remembered that not all fish released will survive. Research done by the Louisiana Department of Wildlife and Fisheries indicates that release mortality (deaths) can be as high as 26% with live bait fishing and 9% with artificial lures.

Lowering the creel limit by 5, or maybe even 10 fish, from its current 25 may seem like a good idea too. It sounds like a 20 to 40% cut in harvest. But it isn't. Intensive interviewing of fishermen at trip end over the years has shown that the average harvest of speckled trout per angler per day in Louisiana is less than 3 fish — 2.3 to be exact. In order to affect the average person's catch, the cut in the creel limit would have to be deep, almost certainly to less than 10 fish.

Losing much of the harvest from the male half of the population and dramatically lowering creel limits maybe more than the average angler wants to bear. Fishermen fish for a wide variety of reasons; catching a trophy is only one of them.

T.E.D. CHRONICLES

After one of the most bitter battles in fisheries management history, peaking with the failed attempt by the Concerned Shrimpers of America to amend the Endangered Species Act in 1987, the National Marine Fisheries Service (NMFS) began putting turtle excluder device (TED) regulations into effect. A review of the rule changes since 1988 shows that TED rules haven't become any easier over the years.

May, 1989 NMFS requires all vessels 25 feet long or longer to use TEDs in their trawls in offshore waters. Vessels under 25 feet in offshore waters may either use TEDs or 90 minute tow times.

August, 1989 NMFS announces gulfwide synchronized trawling times for vessels of any size in offshore waters, who choose not to use TEDs. Under the schedule, all trawls would have to be out of the water at the same time so that enforcement agents can be sure that no one goes over the 1 hour 45 minute tow time.

September, 1989 NMFS discards synchronized tow times.

May, 1990 NMFS requires TEDs in all shrimp nets used in inshore waters unless the shrimper limits his tow times to 90 minutes.

September, 1992 NMFS reduces tow times from 90 minutes to 75 minutes for those vessels eligible to use tow times instead of TEDs.

January, 1993 NMFS requires year around TED use in all trawls no matter what the size of the vessel is in all waters with the following exceptions:

- ★ The boat does not have any power or mechanical advantage device on board which can be used to haul any part of the fishing gear on board.
- ★ The boat is operated by a licensed bait trawler who has a recirculating sea water system on board and possesses no more than 32 pounds of dead shrimp.
- ★ The boat has only skimmers, wingnets or pusher head trawls (chopsticks) rigged for fishing.
- ★ The boat has only one net rigged for fishing and that net has a headrope length of less than 35 feet and is used inshore (This exemption is set to expire December 1, 1994).

Boats operating under the above exemptions must obey 55 minute tow times from April 1, through October 31, and 75 minutes the rest of the year.

November, 1993 NMFS approves the use of two new TEDs, the Jones TED and the flounder TED.

June, 1994 NMFS requires shrimpers using bottom-opening TEDs to use more flotation.

December, 1994 The exemption allowing inshore shrimpers with a single 35 foot or smaller trawl to use tow times instead of TEDs expires.

March, 1995 NMFS releases a Sea Turtle/Shrimp Fishery Emergency Response Plan which is to be put into effect by zone for 30 day periods when sea turtle standings are high. Provisions of the plan include no use of soft TEDs, no use of bottom-opening TEDs, no use of flaps over TED openings, and requiring all try nets to have TEDs.

March, 1997 NMFS creates the Shrimp Fishery/Sea Turtle Conservation Area from the shore to 10 miles offshore, between the mouth of the Mississippi and the US-Mexican border. Within this area, NMFS prohibits the use of long flap TEDs, the use of TEDs with

deflector bars at more than a 45 degree, and the use of soft TEDs, as well as requiring the use of TEDs in any try nets larger than 12 feet headrope and 15 feet foot rope length.

December, 1997 NMFS outlaws the use of soft TEDs and requires the use of TEDs in all try nets that are larger than 12 feet headrope and 15 feet footrope length in all waters.

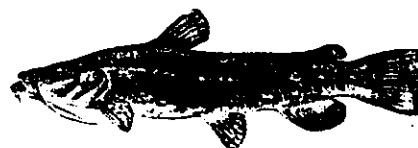
April, 1998 NMFS approves for an 18-month trial period, the use of the Parker soft TED.

June, 2001 NMFS approves the use of the double cover flap for TED openings.

October, 2001 NMFS proposes increasing the minimum size opening for hard TEDs from 32 by 10 inches to a choice of 71 inches with a single cover flap or 56 inches with a double cover flap. Also proposed is an increase in the minimum size on hard TED grids from 28 to 32 inches. Under the proposal, the use of accelerator funnels, hooped hard TEDs, weedless TEDs, and Jones TEDs would be outlawed. Bait shrimpers would not be exempted from TED use in states that allow bait shrimpers to hold other shrimping licenses. Finally, tow times would be required for try nets 12 feet and smaller.

WHERE THE CATS AT?

The flathead catfish, often called the goujon, yellow, Opelousas, or tabby catfish is a highly desirable freshwater sport and commercial fish. Some recreational fishermen fish almost exclusively for this fish, because of its sweet succulent flesh and large size.



In an effort to learn more about the habits of this fish, two Texas Tech University biologists surgically implanted temperature-sensing electronic transmitters in 29 flatheads and released them back into the Texas lake from which they were caught. They tracked the fish, ranging in size from 2½ to 40 pounds, over a two year period. What they found was that flathead catfish prefer to be in the warmest water they can find.

During the summer, the fish were typically found in shallow waters, sometimes only 3 feet deep. Temperatures in these waters ranged from 79 to 88°F. The fish were not forced to use these shallow areas by lack of oxygen in deeper waters, as the scientists measured enough oxygen in those areas for fish life.

In the fall, as air temperatures cooled and water mixing creating the same water temperature top to bottom, the fish began to move into deeper waters. In January and February, when waters reached their coldest temperatures, the flatheads were found in the

very deepest part of the lake, where water temperatures were slightly higher than elsewhere.

Only in the spring were these fish not found in the warmest waters in the lake. The fish delayed moving into shallow waters until water temperatures were 62 to 66°F. When temperatures reached 75°F in late June and July, the catfish moved onto the rock rip-rap of the dam and spawned.

The biologists suggested that the reason that flatheads seek warm waters is that these water temperatures are the preferred ones of their prey, primarily shad and sunfish (bream). They noted no difference in temperature preference by the size of the fish or by sex.

Source: *Temperature Selection by Flathead Catfish in a West Texas Reservoir*. R.R. Weller and J.D. Winter. Proceedings of the 53rd Annual Conference, Southeastern Association of Fish and Wildlife Agencies: 1999.

UNDERWATER OBSTRUCTION LOCATIONS

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

<u>Loran Sites</u>			<u>Lat. & Long. Sites</u>		
27896	46855	TERREBONNE	29 16.200	89 57.200	JEFFERSON
28663	46844	PLAQUEMINES	29 08.150	90 56.487	TERREBONNE
28985	47021	ST. BERNARD	29 16.073	89 57.029	JEFFERSON
			29 16.153	89 57.078	JEFFERSON
			29 17.010	89 56.062	JEFFERSON
			29 20.065	89 59.112	ST. BERNARD
			29 25.576	90 40.370	TERREBONNE
			29 50.424	92 20.782	CAMERON

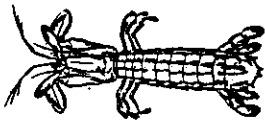
OOPS

A kind reader has pointed a couple of errors in the article on the history of the shrimp drying industry which appeared in the October newsletter. The Manila Village shrimp drying platform was destroyed in 1965, rather than in 1964 as stated in the article. The culprit was Hurricane Betsy which blew through in September of 1965. Our reader also noted that the post office was not on the Manila Village platform itself, but rather on the nearby Cabinash platform, which has been described as a "suburb of Manila Village.

RED SNAPPER DIET

I guess that it is only natural that fishermen are curious about what the fish they are trying to catch like to eat. After all, they are trying to tempt the fish to bite their hook. I've seen snapper fishermen try some of the oddest things for bait or chum, including freshwater crawfish.

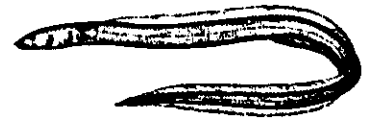
Recently, scientists studied red snapper food habits in the artificial reef area off of the coast of Alabama. They collected about 50 stomachs a month for one year from fish caught in daylight hours from 80 to 110 feet of water. The stomachs were opened after preservation and the animals in them were identified, counted, and weighed. Of the 620 stomachs examined in the study, 263 were empty, 59 had bait only and 298 had food items. They divided the identifiable food items into the general categories of fish, stomatopods (king shrimp or sea lice), crabs, shrimp, and other. The "other" category were mostly tiny pinhead-size zooplankton and bottom worms. The most commonly eaten fish were pipefish, snake eels, sea robins, pinfish, striped anchovies, cusk eels and pigfish. Interestingly, most of the fish species were not ones that one would expect to find on a reef. Six different species of crabs were identified.



Stomatopod



Cusk Eel



Snake Eel

By volume over the whole year, fish was the largest food category at nearly 40%, followed by stomatopods at close to 30% and crabs at 15%. By number, the tiny animals in the "other" category were most common, followed by stomatopods, and then fish. Shrimp only made up one or two percent by either volume or number.

The researchers found some definite shifts in diet by season. Fish were always important, but crabs were the most common category in spring and stomatopods were most important in the winter. A lot of stomatopods were also eaten in the summer, but almost none in the spring or fall. Diet also changed with fish size. As red snapper grew larger they ate more fish. Also, the largest snappers, those 24 inches long and longer, ate far more stomatopods.

The researchers also conducted some night-time sampling in the summer, where they examined the stomachs of 109 snappers. They compared food items to those from day-caught fish from the same time of the year. The day and night diets were surprisingly different. Fish increased from 22% in the day to 45% at night. Stomatopods dropped from

36% in the day to 5% at night. No rock shrimp were found in the day, but they made up 19% of the night-time diet. Crabs were about the same, at 25% in the daytime and 18% at night. The researchers also noted a trend in night feeding by measuring the fullness of the fishes' stomachs. Stomachs were almost empty from 7:00 p.m. until 3:00 a.m. It seemed that they began feeding heavily at 3:00 a.m., reached a peak at 4:00 a.m., but continued heavy feeding until 6:00 a.m.

The researchers noted one other important point. Red snappers feed on animals that are not associated with reefs. This means that they get very little nutritional benefit from the reef, a big surprise to those who believe that red snappers hang out on natural or artificial reefs to get something to eat.

Source: *Red Snapper (Lutjanus campechanus) Diet on Alabama Artificial Reefs.* Jessica R. McCawley, James H. Cowan, Jr. and Robert L. Shipp. Gulf of Mexico Fish and Fisheries: Bringing Together New and Recent Research. 2000

WETLAND WEED TREE

Almost all wetland plants that cause environmental problems in Louisiana are plants not native to this area. The Chinese tallow tree, *Sapium sebiferum* is no exception. One report has it that the first introduction of this Asian tree to America was made by Ben Franklin in the 1700's. 'Ole Ben' can't be blamed for the whole problem though, since plant nurseries throughout the south have been selling this tree as a shade tree for decades.

It makes a good shade tree. It grows quickly and has few insect pests. In the fall, its leaves turn bright red, yellow, orange, and occasionally purple, even in the deep south. The problem is that the tree has escaped from yards and has invaded virtually every wetland habitat that isn't permanently flooded.

It loves water. It will sprout and grow in the full sunlight or the shade. Vast areas of the Atchafalaya Basin and other wetlands swamps are turning into almost solid stands of tallow trees, crowding out native species. It is even found on dredge spoil banks located deep in saltwater marshes.



Once in an area, it is almost impossible to get rid of. It produces large quantities of waxy-coated white seeds, usually 3 per half-inch pod. Each seed sprouts quickly; so quickly that one commercial fisherman from the Basin told me that he thought each seed sprouted twice on the first bounce after falling from the tree. When a tallow tree is cut down, numerous sprouts will also appear from the stump and from its shallow roots.

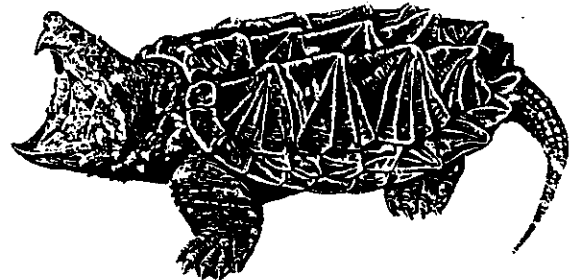
In China, the seeds of the tallow tree were used as a source of tallow to make soap and candles. While the trees' pollen is popular with beekeepers and its seeds are moderately used by squirrels and songbirds, its negatives outweigh its positives. The Chinese tallow tree is another example of the problems caused by the introduction of non-native plants.

EXTENSION FISHERIES OFFICE MOVED

The location of the LSU AgCenter/Sea Grant office for Marine Advisor/Watershed Educator Kevin Savoie has been moved from Cameron to 1225 Hodges St., Lake Charles, LA. 70601. The telephone number is 337/491-2065. Savoie is the Environmental Science and Coastal Fisheries Educator in Calcasieu and Lower Sabine watersheds. This includes Cameron Parish.

AT LOGGERHEADS

The alligator snapping turtle, or as it is most commonly called in Louisiana, the loggerhead turtle, has long been the turtle of choice for soups, stews and sauce piquants. It is a large turtle often reaching weights of over 100 pounds. It is found in many of the river systems draining into the Gulf of Mexico and as far northwest as Oklahoma and Kansas.



It is a poorly researched animal and is also very secretive. In spite of its large size, humans often don't know the animal is present. This, plus the moderately strong demand in the seafood marketplace for turtle meat, has caused some concerns by fish and wildlife managers about overharvest.

Many southeastern states have closed commercial harvest or even all harvest of this turtle. Arkansas is one such state, having banned all harvest of alligator snapping turtles in October, 1993. This was important to Louisiana, as Arkansas was a strong supplier of these turtles to the Louisiana market.

In 1994-95, Arkansas Game and Fish Commission biologists conducted a statewide survey of alligator snapping turtle populations in their state. Arkansas game wardens in each of the state's counties, and biologists statewide were asked to plot on maps where they had seen alligator snapping turtles. Sampling was then done at 4 locations in each county over a two year period by making overnight sets with six 4-foot hoop nets baited with fish.

Turtles caught were counted by species and the carapace (upper shell) length was measured on alligator snappers. All turtles were then released. A total of 8,602 turtles were captured: 445 alligator snappers, 230 common snappers, 384 soft-shell turtles, 535 Missouri river cooters, 6,621 red-eared sliders (mobelians), and 387 unidentified turtles.

Alligator snapping turtles were captured in 56 of 75 counties (75%). They were found in all but the mountainous areas of the state, where they were not expected to be found. The number of alligator snappers caught was higher than expected, and they were found in counties where they had never been recorded before.

Statewide, carapace length averaged 13½ inches. Interestingly, the average size was not different in counties open to commercial turtling before the 1993 closure as compared to those that were closed. Also of interest was the fact that alligator snapper catch in the study was twice as high in previously open counties, as compared to previously closed counties.

The only negative result was that larger turtles (over 13 inches carapace length) were caught in lower numbers in previously open counties than in previously closed counties. Earlier research done in Louisiana showed that female alligator snapping turtles don't reach breeding size until 13 inches and males until 15 inches.

In spite of the generally positive results of the study, the biologists involved recommended that harvest stay closed until more research is done on populations, size and age at maturity, and other subjects.

Source: *Status and Distribution of Alligator Snapping Turtles in Arkansas*. B. K. Wagner, D Urbston and D. Leek. Proceedings of the Fiftieth Annual Conference, Southeastern Association of Fish and Wildlife Agencies. 1996.

RECORD BOOKS AND TAX EXEMPT FORMS

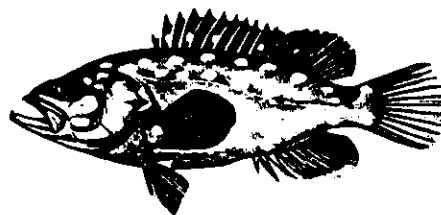
Over the years many of you have used the LSU AgCenter's *Commercial Fisherman's and Trapper's Record Books* to keep a record of your expenses and earnings. With the new year upon us, now is a good time to get your new record book. Also, available are sales tax exemption certificates for commercial fishermen. If you would like

a record book or sales tax exemption application, call, write, or drop by your local extension marine agent's office.

<u>Agent</u>	<u>Location</u>	<u>Telephone Numbers</u>
David Bourgeois	Houma & Cut Off	985/873-6495, 504/632-6852
Sandy Corkern	Franklin	337/828-4100, ext. 300
Rusty Gaude'	Braithwaite	504/682-0081, ext. 2233
Thomas Hymel	Jeanerette	337/276-5527
Brian LeBlanc	Covington	985/893-4449
Kevin Savoie	Lake Charles	337/491-2065
Mark Schexnayder	Metairie	504/838-1170
Mark Shirley	Abbeville	337/898-4335

GROUPE GRUB

The snowy grouper (*Epinephelus niveatus*), is a deepwater grouper found in the Gulf of Mexico and south Atlantic. Of the eight species of groupers commonly found off of Louisiana, this species lives in the deepest waters. This is typically near where the gently sloping sea bottoms start dropping sharply into the deeper waters on the continental slope further offshore.



Very little research work has been done on this species. One study that was conducted on snowy groupers was on their food habits off of North Carolina. In this study, the stomachs of 5088 snowy groupers were examined. The fish were taken by commercial handlines from waters 450-640 feet deep. A large percentage of the stomachs contained no food, probably because many of the fish regurgitated (vomited) as they were brought up from deep waters. Enough stomachs did contain food to get some results.



By far the most common food items used by snowy groupers were deepwater crabs, which made up 90% of the individual items eaten and 72% of volume of what was in their stomachs. The other main crustaceans eaten were deepwater shrimp at 1% of the food items.

Fish of one sort or another made up 6% of the items but almost 18% of the volume. Most fish were too digested to be identified, but of those that could, butterfish and several species of eels were most common. Squid made up the last significant food item at a little over 2% of the items and almost 10% of the volume.

Virtually all of the food items of the snowy grouper are bottom-dwelling creatures and slow swimmers. All food items were swallowed whole, and larger fish ate larger crabs and fish. Snowy grouper are almost always found on hard bottom or deep reef sites and do not move long distances to feed.

Snowy groupers are excellent table-fare but are seldom caught by recreational fishermen. They do make a significant contribution to Louisiana's commercial grouper catch.

Source: *Food and Feeding Behavior of Adult Snowy Grouper, Epinephelus niveatus (Valenciennes) (Pisces: Serranidae), Collected off the Central North Carolina Coast with Ecological Notes on Major Food Groups.* J. Dodrill, C. S. Manooch III, A. B. Manooch. *Brimleyana* 19:101-135, December, 1993.

THE GUMBO POT

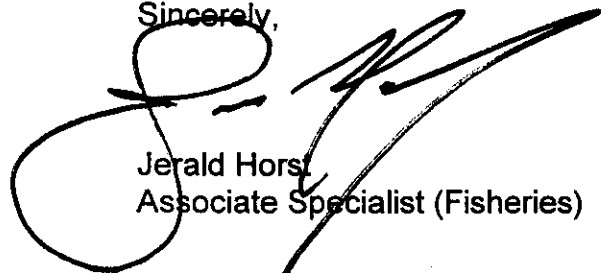
Oysters topped with Crabmeat

I sampled this absolutely delightful dish when I judged a recent 4-H Seafood Cookery contest. It was wonderful! The contestant that submitted it was Soliska Cheramie of Lafourche Parish. I hope that she doesn't mind that I changed its name slightly to more fully describe the dish.

4	tsp margarine	¼	tsp red pepper
½	cup shallots	½	lb crabmeat
2	sprigs parsley, chopped	12	oysters and ½ cup of the liquid
2	tsp flour	½	cup bread crumbs

Saute chopped shallots and parsley in margarine in 10-inch skillet. Add flour, blend well. Add oyster liquid, stir briskly, add crab meat, and pepper. Cook for two minutes, stirring constantly. Place oysters in a 9x13 inch baking dish. Pour crab meat mixture on top and sprinkle with bread crumbs. Bake at 300 degrees for 25 minutes. Serves 4 modestly.

Sincerely,



Jerald Hors
Associate Specialist (Fisheries)