



Compact News

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July 2009

Director's Corner

The end of an era...

On June 30, 2009, William S. "Corky" Perret retired. He served over 41 years in marine fisheries work, starting as an entry level biologist at the old marine lab on Grand Terre. He worked successively into more and more responsible positions within Louisiana Wildlife and Fisheries until leaving as their Assistant Secretary, just before coming to Mississippi as their head of marine fisheries. His career is long and filled with many accomplishments, too many to mention here. He will be honored by the Commission on October 13, 2009 at the Annual Fall Meeting of the Gulf States Marine Fisheries Commission to be held in Biloxi, Mississippi. I hope all who are able, will make it a day for him to remember. You will find the details on his award on page 9 and check our website for additional details. I do have one story, and you know I could tell thousands about him, it is regarding his nickname "Corky". How many of you know how he got that name? It seems that when he was a small child and was still using a pacifier the end bobbed up and down like a fishing cork, so the name Corky was given to him and it stuck for all these years. How ironic – a fishing cork – a career of work in fisheries. Just thought you would find that an interesting story.

Larry B. Simpson
Executive Director

New GSMFC Publications

No. 172 July 2009. *SEAMAP Environmental and Biological Atlas of the Gulf of Mexico, 2003*. Jeffrey K. Rester, Nathaniel Sanders, Jr., and Butch Pellegrin, editors. Gulf States Marine Fisheries Commission.

No. 171 June 2009. *Annual Report of the Fisheries Information Network in the Southeast Region (FIN). January 1, 2008 - December 31, 2008*.

No. 170 June 2009. *2010 Operations Plan for the Fisheries Information Network in the Southeastern United States (FIN). FIN Committee. Gulf States Marine Fisheries Commission*.

No. 169 July 2009. *Law Summary 2009. A Summary of Marine Fishing Laws & Regulations for the Gulf States*. Teri L. Freitas (Editor). Gulf States Marine Fisheries Commission.

No. 168 July 2009. *Licenses and Fees for Alabama, Florida, Louisiana, Mississippi, and Texas in Their Marine Waters for the Year 2008*. Teri L. Freitas (Editor). Gulf States Marine Fisheries Commission.

No. 167 July 2009. *A Practical Handbook for Determining the Age of Gulf of Mexico Fishes – Second Edition*. Steve VanderKooy (Editor). Gulf States Marine Fisheries Commission.

All Commission publications are available electronically at www.gsmfc.org or by request as paper copies until supplies run out.

COMMISSION HOSTS FOR-HIRE DATA COLLECTION METHODS WORKSHOP

Dave Donaldson

During the Gulf States Marine Fisheries Commission's 59th Annual Spring meeting, the Commission conducted a workshop to address the various data collection methods for the recreational for-hire fishery. The workshop was attended by members of the various Gulf States resource agencies, NOAA Fisheries, non-governmental organizations (NGOs) and a multitude of charter boat owners and captains as well as other industry groups. Roy Crabtree, NOAA Fisheries Regional Administrator for the Southeast Region, opened the workshop and stated that recreational data collection methods in the Gulf of Mexico for-hire industry have become an important topic. He noted that, "We all agree that there is room for improvement in the current methods but if we work together, the final product should result in better for-hire data collection methods in the Gulf of Mexico."



The workshop consisted of several presentations regarding the various data collection being conducted or proposed, evaluation of those methods, and recommendations. Bob Zales presented information about the Gulf of Mexico Angler Reporting System (GOMARS) which would use a variety of methods including cell phones, internet, smart phones, and logbooks for collecting catch and effort from the for-hire fishery. Michelle Kasprzak talked about the Louisiana For-hire Trip Ticket Project which is a voluntary for-hire reporting system to collect number of trips, number of anglers, area fished, time fished, trip origin, and other pertinent information. Pres Pate provided an overview of the Marine Recreational Information Program (MRIP) and Beverly Sauls presented information about the MRIP Gulf of Mexico logbook pilot project which will develop a logbook program for collecting catch and effort data as well as a verification component from the for-hire fishery. Jeff Barger and Heidi Henniger reported on the Save Ourselves (SOS) Electronic Logbook Project which will develop a functioning electronic log book and integrate it with vessel monitoring systems (VMS), to demonstrate viability of real-time data collection, and broaden the discussion of alternatives for data collection in the for-hire sector. After the presentation, the group discussed the various methodologies and from those discussions, developed the following recommendations:

- Implement a mandatory logbook for trip level reporting in the for-hire sector in Gulf of Mexico;
- Need to consider all available technology for collecting these data;
- Need to develop a program with compliance and enforcement methods;
- Need to have a statistically proven validation method;
- Need to develop pilot programs complimentary with MRIP;
- Programs need to collect all necessary data elements as determined by fishery managers and stock assessment scientists;
- Develop outreach and education for any adopted logbook programs as well as promote conversation between MRIP and the various proposed projects; and
- The development and implementation of these methods need to be a cooperative effort between the states, GSMFC, NOAA Fisheries, and the for-hire industry.

The detailed record of the workshop is available at the GSMFC office. For more information, contact Dave Donaldson.

STUDY UNDERWAY TO DOCUMENT THE ECONOMIC PERFORMANCE AND IMPACTS OF THE INSHORE SHRIMP FISHERY THROUGHOUT THE GULF

Alex Miller

As an initiative under its newly formed fisheries economic program, the Commission has recently launched its first economic data collection project: a survey of the Gulf of Mexico's inshore shrimp fleet. This study focuses on the economics of commercial shrimp harvesting in Texas, Louisiana, Mississippi, Alabama, and Florida state waters. This survey is the first systematic, multi-state effort to analyze the economic performance of this significant commercial fishery and its contribution to the regional economy. It is intended to serve as a complement to previous studies of commercial shrimping in federal waters in the Gulf conducted by NOAA Fisheries.

The Commission is collaborating with the Louisiana Department of Wildlife and Fisheries Socioeconomic Research and Development Section in the implementation of this survey and the analysis of the results. The Commission has also obtained the cooperation and support of the relevant state regulatory agencies and several industry groups within each of the five Gulf States.

This study is gathering up-to-date economic data, such as revenue, operating costs, annual expenditures, employment data, and vessel characteristics of the inshore shrimp fleet and will document the current economic conditions of commercial shrimping in the Gulf. The information collected in this study will also be used to estimate regional economic impacts of the industry, the number of jobs and amount of revenue that shrimping contributes to the regional economies.

The information gathered in this project will supplement or replace existing economic data that are often piecemeal, outdated, or not fully relevant. The availability of unbiased, systematic economic data of this nature should assist fisheries managers, commercial shrimpers, and others who utilize the Gulf's shrimp resources in the formation of informed management decisions.

This study is being conducted as a mail survey, which began in early April 2009. Individual responses will remain confidential. All figures and estimates will be presented as industry totals and averages. The first 600 inshore shrimpers who complete the survey will receive a \$25.00 gift card that can be used anywhere credit cards are accepted. A final report of the results will be compiled and presented soon after the analysis is conducted. In addition to the compilation of the final report, economic data and subsequent impacts will also be presented through the Commission's newly developing online Fisheries Economic Information Portal. A variety of stakeholders will be able to easily access this information through this portal. Please feel free to contact Alex Miller, Economic Program Coordinator, if you have any questions concerning this project.



THE GULF'S 'OTHER' SEATROUT

Steve VanderKooy

Sand and silver seatrout are commonly found in shallow waters of the Gulf of Mexico from southwest Florida to the Bay of Campeche, Mexico. There are a number of local names for these two species, which include, white trout and sand trout and are used by fishermen interchangeably. The valid scientific names for these species are *Cynoscion arenarius* (sand seatrout; Figure 1) and *Cynoscion nothus* (silver seatrout; Figure 2). Both species show up in the local fish markets, sometimes as white trout, but more often as a substitute for fresh spotted seatrout. Both species make excellent table fare, but should be put on ice immediately to retain the firmness of the flesh. Neither fish freezes well, so there is little commercial demand for them away from the coast.

Generally, sand seatrout occurs in the nearshore areas of the Gulf States including bays, marshes, and outward towards the barrier islands. In contrast, silver seatrout spends most of its life history in deeper waters, occasionally occurring in the nearshore areas primarily near the barrier islands, but both species overlap to some extent in bays and estuaries.

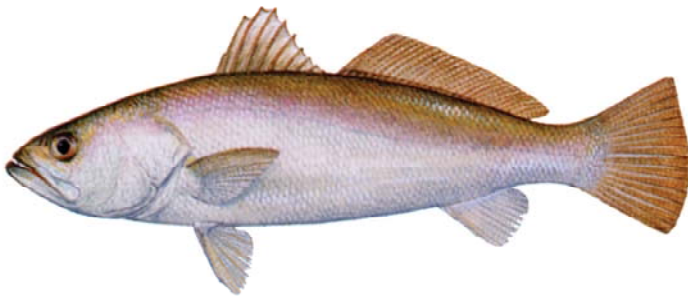


Figure 1. *Cynoscion arenarius*, sand seatrout.

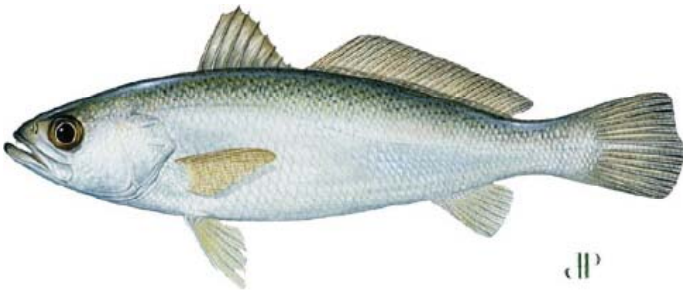


Figure 2. *Cynoscion nothus*, silver seatrout.

Sand seatrout shares similar habitat preference with its more popular cousin, the spotted seatrout (*C. nebulosus*), which inhabits seagrass systems during the summer months while juvenile sand seatrout have a preference for unvegetated benthic habitat during the same time frame. During the winter months spotted seatrout utilize deep sites within the estuary; while sand seatrout tend to migrate to deeper waters nearshore and offshore during colder months (Simmons 1957, Swingle 1971, Ditty et al. 1991). In contrast, silver seatrout differ in habitat preference by remaining primarily offshore and at deeper depths than either sand or spotted seatrout (Ginsburg 1931, Chittenden and McEachran 1976).

SEAMAP samples taken annually (Figure 3) indicate that there are definite distribution patterns which are unique to each and are confirmed in the literature by a number of researchers (Shlossman and Chittenden 1981, DeVries and Chittenden 1982, McDonald et al. 2009). Overall, the SEAMAP data (Figure 3) does indicate that there is more overlap as you move south along the Texas coastline. The species separate cleanly along the Louisiana coast and around the mouth of the Mississippi River. The studies from Texas also find a similar pattern in that sand seatrout use both the offshore and inshore bays in contrast to silver seatrout which use the offshore waters throughout their entire lives. It is interesting to note that the abundance of sand seatrout offshore of Texas was lower than that of silver seatrout for every season except the summer. This lower abundance is most likely due to differences in their life histories and environmental preferences. Silver seatrout have a much higher salinity tolerance and are more likely to be abundant off the coast of Texas where salinities are higher than off the coasts of Louisiana or Mississippi where salinities are reduced by the productive Mississippi and Atchafalaya rivers (McDonald et al 2008, Dinnel and Wiseman, 1986).

Sand seatrout spawn in the Gulf from March through September, with two peaks in March-April and August-September. Although spawning of sand seatrout has been documented to occur in offshore waters close to nursery areas, spawning depths vary throughout the Gulf. In Texas, spawning has been documented at depths from 7-91 m depending on location. Ripe sand seatrout were found in similar depths (73-91 m) off the Mississippi coast. In Florida, sand seatrout spawn in depths less than 20 m, but which were characterized as areas of high salinity near coastal embayment's and other nursery areas.

Silver seatrout follow a similar pattern spawning from March to October with a spring peak and another in late summer, however, silver seatrout tend to prefer much deeper, higher salinity waters than do sand seatrout. DeVries and

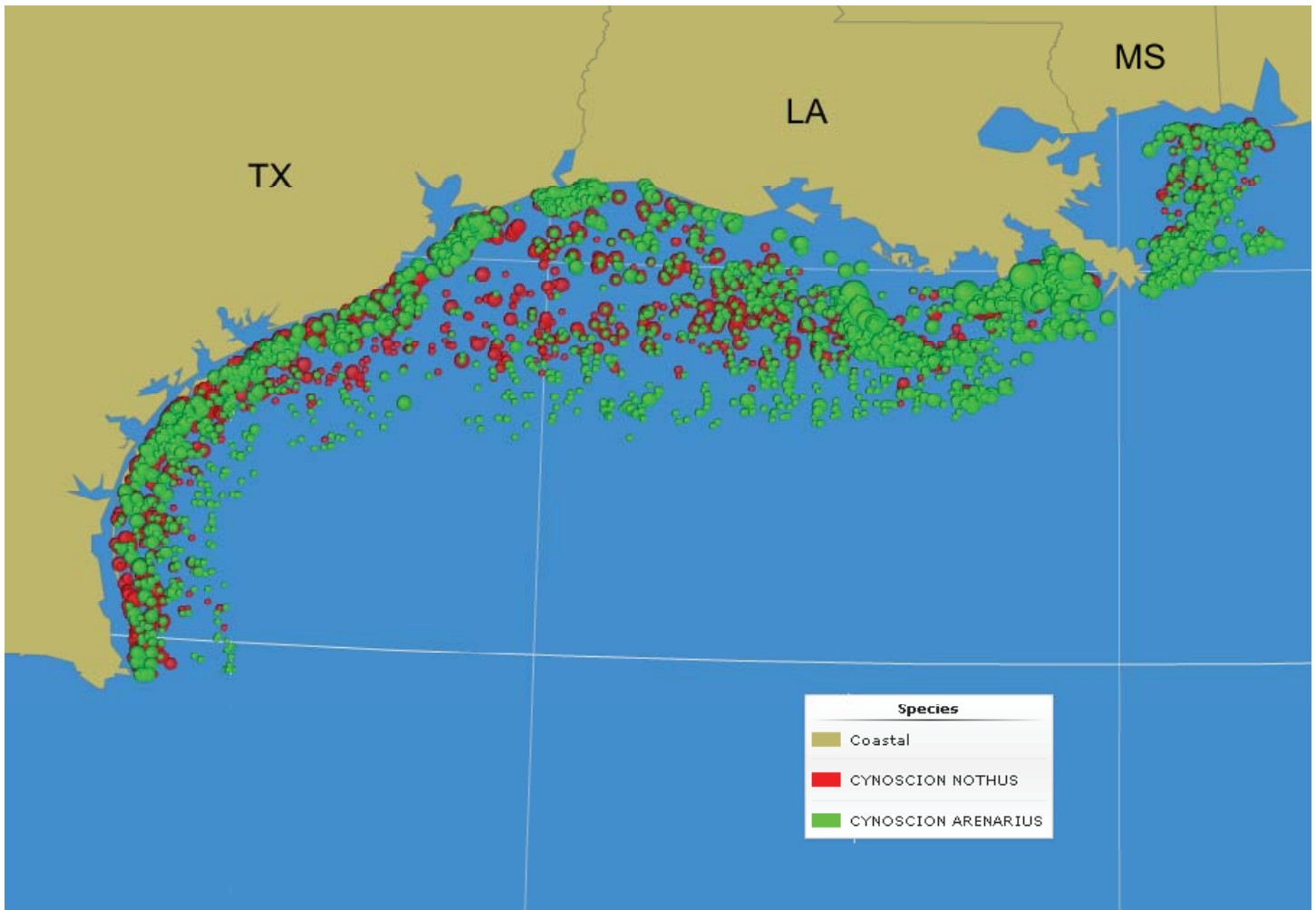


Figure 3. Distribution of *Cynoscion arenarius* (green) and *C. nothus* (red) in the 2006 SEAMAP summer trawl survey. Circle diameter indicates relative abundance of those species respectively.

Chittenden (1982) suggested that silver seatrout spawn in peaks similar to sand seatrout to use a mechanism of egg or larval transport which takes advantage of concurrent periods of rising sea levels. The surface currents and prevailing inshore winds transport the silver seatrout eggs and/or larvae from the offshore spawning areas to estuarine nurseries.

Misidentifications are a major problem with these species. In fact, there have been anglers who actually reported they had landed “young speckled trout that don’t have their spots yet,” when showing off their coolers of fish. To the untrained eye there is little difference between the two species, but on further examination, there are clear distinctions between them. The easiest diagnostic for sand seatrout is the anal fin elements which consist of 2 spines and usually 11 soft rays versus 8-9 soft rays in silver seatrout. Another, more subjective diagnostic tool is that sand seatrout generally has a pinkish sheen on the upper half or dorsal side of the body while the silver seatrout is generally grayer or truly more silver.

Sand seatrout is most frequently caught by hook-and-line anglers targeting spotted seatrout in their overlapping inshore habitats; while silver seatrout are generally harvested in much greater numbers as bycatch by commercial shrimp fishermen in the offshore waters. Sand seatrout show up in rather high numbers in the recreational landings data as well as in the commercial catch reported by NOAA (Table 1). The problem is that most anglers, and even some samplers, lump the two species into a single “seatrout” group resulting in the potential for an unrealistic species composition in the NOAA data. While there are very few silver seatrout identified in the commercial data from NOAA, the trip ticket data indicates that silver seatrout are landed in fairly high numbers.

At this time there are no regulations on either of these species in the Gulf region and while very few people target them directly, they are caught incidentally and retained in relatively high numbers by recreational anglers.

The GSMFC convened a task force to begin development

Table 1. Total Gulfwide (including Texas) commercial and recreational landings for “sand seatrout” in pounds from 1988 to 2007.

Year	Gulf Total Commercial	Gulf Total Recreational
1988	403,964	1,889,930
1989	315,897	1,715,022
1990	317,954	2,055,503
1991	343,231	2,970,698
1992	386,094	2,055,280
1993	376,799	2,582,602
1994	591,267	3,052,633
1995	308,831	2,363,557
1996	191,405	2,221,054
1997	164,447	1,926,249
1998	126,109	1,972,368
1999	210,905	3,019,632
2000	164,824	3,015,883
2001	125,108	2,104,938
2002	143,930	1,842,260
2003	112,401	1,678,907
2004	71,103	1,274,629
2005	73,092	1,001,770
2006	62,752	1,682,974
2007	91,448	1,773,020
TOTALS:	4,581,561	42,198,909

of a species profile for sand seatrout because of the frequency that they are encountered by recreational anglers and commercial fishermen. In addition, there is a lack of consolidated information regarding these fish and the associated fisheries. In the process of collecting all the relevant fishery information, the task force realized the problems with species identification and determined that the fishery is actually a two species complex of sand and silver seatrout. The commercial fishery consists of both species while the recreational fishery is dominated by sand seatrout. The task force is now adding the available information on silver seatrout to the profile and anticipates regaining their momentum towards completion of the document.

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HELP STOP AQUATIC HITCHHIKERS

James Ballard

The Aquatic Invasive Species Program, that provides administrative support for the Gulf and South Atlantic Regional Panel (GSARP), funded a project to develop "Help Stop Aquatic Hitchhikers" brochures. "Stop Aquatic Hitchhikers!" is a national campaign that helps recreational users to become part of the solution in stopping the transport and spread of aquatic invasive species. Mississippi Department of Wildlife Fisheries and Parks (DWFP), who took the lead on the project, started by acquiring authorization to use copyrighted material from the Minnesota Department of Natural Resources in order to use a brochure that they had already developed as a template for the GSARP's brochure.



After receiving permission, the GSARP picked a wide array of aquatic invasive species including plants and animals from both the fresh and marine environments that are problematic in its member states. These species consisted of giant salvinia, island applesnails, silver carp, green mussels, Nile tilapia and the Australian spotted jellyfish. For each of these species, a brief description is given including their place of origin and the main vector for their introduction.

Along with describing some of the most prevalent invasive species, the brochure outlines ways in which environmental user groups (boaters, anglers, hunters, etc.) can help stop the spread of them and in doing so, help protect our valuable water resources. The brochures explain the importance of inspecting your boat, trailer and equipment and removing any aquatic plants, animals or other foreign debris before leaving the boat launch. They also explain how draining all the water out of your boat and bait containers before leaving the access area can help stop the spread of invasive

INSPECT

Enjoying the great outdoors is important to many of us. Boating, fishing, hunting and wildlife watching are traditions that we want to preserve for our children and their children. Today, these traditions are at risk. Aquatic invaders such as tilapia, green mussels, island applesnails, Australian spotted jellyfish, bighead and silver carp, and hydrilla threaten our valuable waters and recreation. These and other non-native, or exotic plants and animals do not naturally occur in our waters and are called invasive species because they cause ecological or economic harm.

The main way invasive species get into lakes, rivers and wetlands is by "hitching" rides with anglers, boaters, and other outdoor recreationists. If you leave a body of water without taking precautions recommended in this brochure, you may be transporting these harmful species from one lake, river or wetland to another. These "aquatic hitchhikers," such as Giant Salvinia (right), have invaded many waters, doing irreparable harm to lakes, streams and wetlands and their native habitats.

The good news is that the majority of waters are not yet infested with invasive species and you can help protect our valuable waters.

Stop Aquatic Hitchhikers!

Aquatic hitchhikers can spread in ways such as on aquatic plants, on recreational equipment and in water. Fortunately, there are few simple actions you can take to prevent them from spreading.

In many states and provinces it is illegal to transport aquatic invasive species, so taking the following actions may also help avoid a citation (see back page).

INSPECT your boat, trailer and equipment and **REMOVE** visible aquatic plants, animals and mud before leaving the water access.

It is important to carefully remove all plant fragments before you leave the access area to ensure you are not transporting an invasive plant species. This will also reduce the threat of moving organisms that hitchhike by attaching to aquatic plants.

REMOVE

species to new areas. Proper disposal of unwanted bait and other aquatic plants and animals in the trash is addressed as well. The brochures cover the proper reporting procedures you should follow if you think you have found a new infestation of an invasive species, as well as emphasizing the importance of consulting with your local natural resource agency before trying to control and invasive species on your own or before planting or releasing a new species into or near a body of water.

This project resulted in approximately 85,000 brochures being printed, roughly 10,500 for each of our eight member states with their specific states agency's logo and contact information on the back. The brochures were delivered to the state agencies before or during the spring meeting of the GSARP which took place on April 1-2, of this year. The agencies will distribute the brochures during this year boating season, trying to get the information into the hands of as many environmental user groups as possible.

CONTACTS

State Regulations and Information Sources
Many state have regulations that prohibit the transportation of some or all species of aquatic plants as well as the possession and transport of prohibited species.

To learn more contact your state natural resource agency(s) or visit the Web sites listed below.

TEXAS PARKS & WILDLIFE

Texas Parks & Wildlife Department
2200 Harmon Street
Palacios, TX 77465
Leslie Hartman - 361-972-6253
Leslie.hartman@tpwd.state.tx.us

Texas Parks & Wildlife Department
4200 Smith School Road
Austin, TX 78744
Earl Chilton - 512-389-4652

USGS
science for a changing world
<http://nas.er.usgs.gov/>

GULF & SOUTH ATLANTIC REGIONAL PANEL OF AQUATIC INVASIVE SPECIES
<http://mis.gsmfc.org/>

In memory of Bruce Thompson
a man of conservation and passion

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CHARLES H. LYLES AWARD

2009 RECIPIENT

WILLIAM S. “CORKY” PERRET

Dave Donaldson

Chairman Senator Butch Gautreaux announces that William S. “Corky” Perret was selected by the Gulf States Marine Fisheries Commission to receive their prestigious Charles H. Lyles Award. The Award is presented yearly to an individual, agency, or organization which has contributed to the betterment of the fisheries of the Gulf of Mexico through significant biological, industrial, legislative, enforcement or administrative activities. Since 1984, the Commissioners have selected eminently qualified marine fisheries individuals whose careers and contributions to Gulf fisheries are worthy to be labeled “fishery giants”. In the membership of this elite club are Congressmen, scientist, administrators, enforcement and business men from both recreational and commercial industries, just to name a few, who have made monumental contributions to the work in this field.

Corky’s career has spanned over 41 years. After graduate school and an undergraduate degree from University of Louisiana at Lafayette he went to work for Louisiana Wildlife and Fisheries at their marine lab on Grand Terre. He progressively held more and more responsible



CHARLES H. LYLES AWARD RECIPIENTS

2009	William S. “Corky” Perret	Mississippi
2008	Ralph Rayburn (Posthumous)	Texas
2007	Wayne E. Swingle	Florida
2006	Robert P. Jones	Florida
2005	Leroy T. Kiffe	Louisiana
2004	Hal Osburn	Texas
2003	Andrew J. Kemmerer	Mississippi
2002	Jerald K. Waller	Alabama
2001	Walter Fondren, III	Texas
2000	James M. Barkuloo	FWS/Florida
1999	Senator Trent Lott	Senate/Mississippi
1998	Thomas Heffernan	Texas
1997	Walter M. Tatum	Alabama
1996	Tommy D. Candies	Louisiana
1995	Edwin A. Joyce	Florida
1994	Theodore H. Shepard	Louisiana
1993	Louis A. Villanova	Alabama
1992	J. Burton Angelle	Louisiana
1991	John A. Mehos	Texas
1990	Hugh A. Swingle	Alabama
1989	I. B. “Buck” Byrd	NMFS/Florida
1988	John Ray Nelson	Alabama
1987	Senator John Breaux	Senate/Louisiana
1986	J. Y. Christmas	Mississippi
1985	Theodore B. Ford (Posthumous)	Louisiana
1984	Charles H. Lyles	Mississippi

positions under numerous Governors culminating his time in Louisiana by holding the Assistant Secretary position in charge of both fresh and marine fisheries for the state in 1995. Upon leaving the State of Louisiana after 35+ years, he immediately went to work with the State of Mississippi filling their vacant post as Chief of Marine Resources. He held that position until recently when he advanced to the Assistant Director of Mississippi Marine Resources, the position he held until his retirement this June.

His work and influence on individuals he has come in contact with on the numerous boards, commissions and councils, has been profound. While Corky will never be replaced, he will be missed for his wit and as an unflagging champion for marine resources, their users and the habitat that support them.

MISSISSIPPI CAPITALIZES ON DISASTER FUNDS TO RESTORE ARTIFICIAL FISHING REEFS

Ralph Hode

When the winds and tidal surges from Hurricane Katrina subsided in August of 2005, the Mississippi Department of Marine Resources (MDMR), like many of its sister agencies in the northern Gulf of Mexico, immediately began the process of assessing its damages. Aside from the onshore destruction of its primary base of operations, field offices and administrative facilities, it was determined that much of its marine resource had been damaged or destroyed. Among these were the State's artificial fishing reefs which were vital to not only the fishing industry itself, but also to the overall Coastal economy.

Early post Katrina, sonar analysis revealed that many of the Mississippi offshore and near shore artificial fishing reefs no longer existed. Closer examinations by MDMR personnel found that the remnant components of previously deployed fishing vessels, barges, rubble piles and other structure designed to attract and hold fish in the offshore waters of Mississippi Sound had been scoured and silted, or damaged. The damage was extensive enough that they were no longer capable of supporting juvenile fish or smaller species which in turn would have attracted popular sport fishes. In addition, nearshore reefs were also impacted, reducing the availability of species like red drum, white



trout, speckled trout, small sharks, and other fish popular with shore fishermen and those with limited access to the Sound.

In response, MDMR personnel put together an inventory of damages, and developed plans for reef repairs that involved the use of funding opportunities provided by Congress under the Emergency Disaster Recovery Program (EDRP) in September 2006. The plans called for timely and strategic replacement of lost or damaged structural components through the use of a variety of reef materials including pre-fabricated pyramid reefs and Goliath reef balls, concrete rubble, and steel hulled vessels. Restoration was scheduled to take place over a five year period (2006-2011) and includes research aimed at stocking the new and restored reefs with juvenile red snapper spawned and reared at the Mississippi Gulf Coast Research Laboratory (GCRL), in Ocean Springs.



Three years later, MDMR has deployed in nearly 66 reef areas impacted by Hurricane Katrina. Kerwin Cuevas, MDMR Offshore Reef Coordinator, indicated in his most recent reports that approximately 44% of the planned work on the offshore reefs has been completed and that additional deployments are scheduled for the fall of 2009.

Mike "Buck" Buchanan, MDMR Inshore Reef Coordinator, indicated that a total of 29 inshore reefs have now been restored, covering approximately 290 acres of coastal water bottoms across

GSMFC COMMISSIONER

Frederic L. Miller

June 26, 1945 - June 1, 2009

Fred Miller was a life-long resident of Shreveport, Louisiana and was an avid sportsman. Fred practiced as an attorney-at-law since 1970 specializing in natural resources (including oil and gas), civil, probate, estate and business planning, and construction law.

Fred has always been a strong advocate for recreational fishing and hunting, serving as the President of the Louisiana chapter of the Coastal Conservation Association (CCA), Chair of the Louisiana chapter of Ducks Unlimited and was appointed to the Louisiana Wildlife and Fisheries Commission by Governor Blanco as an at-large member in 2004.

Fred served as the Louisiana Governor's appointee to the GSMFC from 1996 until 2004 and served as Vice-Chair of the Commission in 1999. We will miss Fred's active passion for fish and their environment and will not soon see his equal in this regard.

When appointed to the LWF Commission, Miller expressed his desire to "...conserve and protect Louisiana's natural resources and sporting heritage for my grandchildren and generations as yet unborn."



the three coastal counties of Mississippi. Inshore and nearshore restoration is approximately 60% complete and will continue as local entities complete repairs to pre-storm condition, piers and other public structures that are used by shore fishermen and small boat owners for recreational fishing purposes.

The GCRL is addressing natural spawning and larval/juvenile food requirements for hatchery spawned red snapper, as it continues with plans to release fish on the newly refurbished reefs. Recent reports indicate that GCRL expects its first release of tagged red snapper in the fall of 2009.

Concurrently, MDMR biologists are sampling the reefs to determine natural abundance of juvenile red snapper stocks prior to the hatchery release later this year. As reefs are sampled, MDMR biologist are classifying, measuring, tagging, and determining survival disposition of all fish as they are released. Since this effort began in the spring of 2008, a number of the tagged fish have been recaptured, indicating that the newly refurbished reefs are indeed attracting and holding fish.

AQUACULTURE SITE SUITABILITY IN THE GULF

Jeff Rester

The Commission's aquaculture site selection project for the Gulf of Mexico has been completed. The purpose of the project was to select suitable sites for offshore cage aquaculture in the U.S. Gulf of Mexico based on the use of geographic information system (GIS) based models to support decision making. The site selection process only considered the use of fish cages in the offshore environment, so the literature suggested that a minimum depth of 25 m was required with a maximum depth of 100 m. In order to avoid the accumulation of wastes, a minimum average current speed of 8 cm/s was needed. Water quality parameters included dissolved oxygen, temperature, and salinity. Only native species from the Gulf of Mexico have been proposed as culture species so temperature ranges of 17 to 30°C were considered along with salinity values between 20 and 36 ppt. In order to properly anchor fish cages and ensure proper waste dispersal and bioaccumulation, sand, mud, and silt were considered acceptable bottom types for aquaculture facilities.

Ecological buffer zones of 3 km were placed around seagrass areas, coral, hardbottom, marine protected areas, Fishery Management Council designated Habitat Areas of Particular Concern, and National Marine Sanctuaries. Safety buffer zones of 3 km were placed around shipping fairways, vessel lightering zones, and dredged material disposal areas. A 1 km buffer zone was placed around all artificial reefs and artificial reef zones to mitigate potential user conflicts.

While approximately 75,000 km² of the Gulf of Mexico were deemed suitable for aquaculture in the Gulf of Mexico, additional site specific data should be gathered at each proposed facility before aquaculture operations are allowed to commence. Some areas may be more suitable than others. Since offshore aquaculture has not been attempted in the Gulf of Mexico on a large scale, the project did not try to determine which areas within the allowable area were more suitable than others. Several factors to consider in defining this suitability include distance from shore, distance to port, distance to processors or seafood dealers, and distance to support facilities (possibly an oil and gas platform). The results from this portion of the project will allow aquaculturists to determine where aquaculture should be allowed. They can then gather more site specific information to determine which sites are the most suitable for their needs. For more information on the project or to receive a copy of the final report, please contact the Commission office.

In the Kitchen

Fish Tacos

James and Sarah Ballard

1 cup all-purpose flour
2 tablespoons cornstarch
1 teaspoon baking powder
1/2 teaspoon salt
1 egg
1 cup beer

1/2 cup plain yogurt
1/2 cup mayonnaise
1 lime, juiced
1 jalapeno pepper, minced
1 teaspoon minced capers
1/2 teaspoon dried oregano
1/2 teaspoon ground cumin
1/2 teaspoon dried dill weed
1 teaspoon ground cayenne pepper

1 quart oil for frying
1 pound fish fillets, cut into 2 to 3 ounce portions
1 (12 ounce) package corn tortillas
1/2 medium head cabbage, finely shredded

DIRECTIONS

Beer Batter: Combine flour, cornstarch, baking powder, and salt. Blend egg and beer, then stir into flour mixture.

White Sauce: Mix yogurt and mayo. Gradually stir in fresh lime juice until slightly runny. Season with jalapeno, capers, oregano, cumin, dill, and cayenne. Refrigerate sauce at least an hour (longer is better).

Dust fish with flour and dredge in beer batter and fry until golden brown. Drain fish on paper towel. Lightly fry tortillas.

To serve, place fried fish in a tortilla, and top with shredded cabbage, and white sauce.



Upcoming Meetings

Arenarius Technical Task Force
August 12-14, 2009
The W New Orleans
New Orleans, LA

State/Federal Fisheries Management Committee
August 19, 2009
Hilton New Orleans Airport
Kenner, LA

For-Hire Logbook Workshop
August 20-21, 2009
The W New Orleans
New Orleans, LA

Oyster Technical Task Force
September 14-16, 2009
The W New Orleans
New Orleans, LA

Gulf of Mexico Port Samplers Meeting
September 22-23, 2009
Holiday Inn Sunspree Resort
Panama City Beach, FL

National State Directors' Meeting
September 28 - October 2, 2009
Hyatt Regency San Antonio
San Antonio, TX

GSMFC 60th Annual Meeting
October 12-15, 2009
Imperial Palace Casino, Resort & Spa
Biloxi, MS

Joint Artificial Reef Subcommittee Meeting
October 27-28, 2009
Sirata Beach Resort & Conference Center
St. Pete Beach, FL

**You can always find us at
www.gsmfc.org**



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