

Coastal Markers



Volume 16, Issue 3

NEWSLETTER OF THE MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

Winter 2013

Limited MS oyster season opens along with new Pass check station

A special, limited 2012-2013 oyster season opened Nov. 5 through Dec. 29, 2012 in Mississippi. Dredge boat sack limits were set at 20 sacks per boat per day and 12 sacks per boat per day for tonging vessels. A total of 53,251 sacks were harvested during this time. Oyster harvesters made a total of 3,454 trips, averaging 15.4 sacks per trip for all harvest types.



Garland Harris and his wife Mary Joe unload sacks of commercial oysters to Jerry Forte of Pass Purchasing at Pass Christian Harbor.

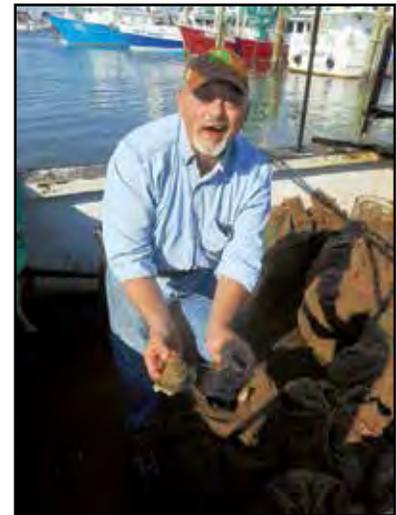
The Mississippi Department of Marine Resources (MDMR) also opened the new Pass Christian Check Station in the Pass Christian Harbor on Nov. 5. This facility houses the MDMR Shellfish Bureau Oyster Check Station for oyster tag distribution and Marine Patrol Office for enforcement officers. The new building has storage space as well as an educational classroom and meeting area. It is 1,810 square feet and is elevated to 22 feet to meet FEMA guidelines.

The special limited season for tonging was extended at the end of December; however, due to heavy rains upstate, the Pearl River exceeded the management plan for tonging areas and continued to rise throughout most of January. The MDMR was finally able to open three areas to the harvest of oysters for tonging only at the end of January. These areas were Areas II "A," II "E" and II "F" Conditionally Approved Waters, which included the Pass Christian, Henderson Point, Hornet's and Square Handkerchief reefs.

For more information on the open and closed areas, call the MDMR's 24-hour Oyster Information Hot Line at 228-374-5167 or 1-800-385-5902.



Southeast view of new Pass Christian Oyster Check Station in the Pass Christian Harbor.



Andrew Livings, Sr. shows off a nice oyster he harvested from the Pass Christian Reef on opening day of oyster season.



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Director's Notes

Danny Guice, Jr.

The Gulf Coast Ecosystem Restoration Council held its first public meeting in Mobile, Ala., in December to introduce the Council and give the public a chance to provide feedback on the Council's restoration planning efforts. The Council, which was established by the RESTORE Act of 2012, will develop and oversee implementation of a comprehensive plan to help restore the ecosystem and economy of the Gulf Coast in the wake of the Deepwater Horizon oil spill. This was just the first in a series of public meetings and listening sessions that the Council will hold in each of the Gulf states in the coming months to ensure plenty of public input throughout the entire process.

In February, the Council scheduled public engagement sessions to provide early opportunities for initial input into the Comprehensive Plan for Gulf Coast restoration. Public engagement sessions were set for February 19 in Mississippi, February 19, 20 and 21 in Louisiana, and February 28 in Florida. The Council will announce more dates and locations via its website as they become available.

The oil spill caused extensive damage to the Gulf Coast's natural resources, devastating the economies and communities that rely on it. In an effort to help the region rebuild, Congress passed the bipartisan RESTORE Act, which dedicates 80 percent of Clean Water Act administrative and civil penalties paid by responsible parties (after the date of enactment of this Act) in connection with the Deepwater Horizon explosion and spill to the Gulf region for ecological and economic recovery efforts. This law will likely generate investments in economic development, tourism promotion and science-based natural resource restoration in the states hit hardest by the spill—Mississippi, Alabama, Florida, Louisiana and Texas.

The Council will work with the State and local communities to identify projects and programs that will restore the region's natural resources and help benefit local businesses, boost their economies and create jobs.

To learn more about the Gulf Restoration Council and RESTORE Act, visit www.restorethegulf.gov

Interim Executive Director

Your purchase of a fishing license supports research and restoration that enhances fishing opportunities in coastal Mississippi.

24-Hour License Sales: Call
1-800-5GO-HUNT
(1-800-546-4868)



Scan this to buy a license online
ms.gov/gf/hunting

Activities of Marine Patrol Officers working under the Joint Enforcement Agreement with NOAA from October 2012-December 2012

Patrols.....	161
Contacts.....	1,712
Sea hours.....	689
Man hours.....	2,369
State violations.....	24
Federal violations.....	5



MARINE PATROL CITATIONS OCTOBER 2012-DECEMBER 2012

Shrimp-3
Crab-5
Oyster-48
Live Bait-7
Net Fish-5
Fishing-68
Miscellaneous Seafood-0
Boat and Water Safety-37
Marine Litter-3
Miscellaneous-12

TOTAL-188

Lyman Hatchery News

Striped Bass Program enhances fishery

The Gulf Coast Research Lab's Striped Bass Program has been ongoing for over 40 years. Since 2007 the program has been a joint effort between the University of Southern Mississippi, Gulf Coast Research Lab and the Mississippi Department of Marine Resources Lyman Fish Hatchery providing a successful fishery for recreational anglers. The Lyman Hatchery raises striped bass throughout the year and conducts releases in early summer and late fall into our Mississippi coastal rivers. The striped bass is unique from other regional game fish in that it is anadromous, which means they live in saltwater and migrate up rivers to reproduce. Having species of fish that utilize both fresh and salt water habitat can be good indicators of the overall health of these ecosystems. They provide opportunity for local sportfishing anglers to harvest trophy-sized game fish in coastal tributaries. Biologists Larry Nicholson, Jennifer Green, and Paul Mickle have taken on the task of studying the ecology of this fish to understand its movements and migrations. Presently, they are surgically tagging striped bass with sonic transmitters to follow their movements and determine the habitats that striped bass are using. The findings show that striped bass are habitat specialists that prefer deep, cool, salty holes, that serve as thermal refuges within the rivers and need this specific water quality to survive in our warm rivers. Movements seen within the Biloxi River show that they move up and down the river seeking this specific habitat and staying in these habitats during the hottest parts of the year.

The striped bass is a wonderful game fish for anglers who enjoy strong fighting fish that hit top water baits as well as crank baits and other various trolling styles. Striped bass are very good eating, and the limits are easy to fill with minimum lengths of 15 inches and a creel limit of 3.

The Striped Bass Program has endured many challenges involving hurricanes, droughts, and disease to provide this wonderful fishery for anglers. We encourage you to pursue this fish during your next fishing trip. If you are successful, please report the catch to the Striper Hot Line.



An acoustic transmitter (left) being surgically implanted into the body cavity of a striped bass (right).



Jennifer Green with a 7-lb 11.5-oz striped bass from the Tchoutacabouffa River.



Paul Mickle with 4-lb 8-oz striped bass from the Biloxi River.

MS Department
of Marine
Resources
Striper Hot Line

1-866-244-6420

MDMR Marine Patrol seizes 11 illegal gill nets, more than 300 pounds of illegal red drum in Hancock County

The Mississippi Department of Marine Resources (MDMR) Marine Patrol seized 11 gill nets—totaling 1,310 feet—and 333.3 pounds of illegal red drum (valued at \$749.93) from Herman William Rieux, who was removing fish from his nets off east Gulf Street in the Ansley community in Hancock County at 3 a.m. Feb. 1.

Rieux was cited for 11 counts of possession of non-biodegradable gill nets, 11 counts of possession of untagged gill nets, two counts of possession of commercially taken undersized red drum, one count for not having a commercial gill net license and one count of possession of bull red drum exceeding the daily bag limit. Each count is punishable by a fine of \$100 to \$500.

Marine Patrol received a tip from a reliable source on Jan. 21 that Rieux was engaged in illegal netting activity. That night, marine patrol officers Will Freeman and Tim Broder launched a small, flat-bottom vessel in Pearlinton and headed toward Ansley where they began surveillance of the area. On Jan. 28, marine patrol officers Broder and Amanda Skok located the suspected vessel, a 1977 Reno wooden skiff, in a slip where it was laden with monofilament gill nets. The surveillance continued that evening with the assistance of marine patrol officers Johnny Ladner and Chris Scott.

On Jan. 31, Marine Patrol Officer Barron O'Grady joined in the surveillance operation. On the morning of Feb. 1, Officer Tim Broder waited in a nearby marsh area on foot and then confronted Rieux while he was in the process of unloading his boat.

Officers began removing red drum from the suspect's vessel, confiscating 64 illegal red drum weighing 333.3 pounds. Each of the 11 monofilament gill nets was also removed from the vessel and after being measured was transported and stored by Marine Patrol pending court order for their forfeiture and destruction.



Illegal red drum seized.

Mississippi Coastal Cleanup nets 2,053 bags of trash

More than 2,500 volunteers scoured Mississippi's beaches and waterways picking up marine debris at 68 designated cleanup sites Oct. 20, 2012 during the 24th annual Mississippi Coastal Cleanup, part of the International Coastal Cleanup—the world's largest volunteer effort to clean up the marine environment. During the 2012 Mississippi Coastal Cleanup, 2,545 volunteers picked up 2,053 bags of trash, including 164 bags of recyclables, along 199 miles of Coastal waterways in Hancock, Harrison and Jackson counties and the barrier islands. The cleanup is organized by the Mississippi Department of Marine Resources and Mississippi Marine Debris Task Force. The Mississippi Coastal Cleanup returned to the beaches and barrier islands and again expanded its reach through its partnership with Mississippi Power's Renew Our Rivers program, which cleaned two sites on the days leading up to Saturday's cleanup and removed more than 10 tons of debris.

The Mississippi Coastal Cleanup recycling effort grew from four sites where volunteers collected recyclables during the 2011 cleanup to 15 sites in 2012. Volunteers who participated at these sites collected trash and filled 164 bags with recyclable items.

All told, 2,545 volunteers collected 54,680 pounds of trash including 184 tires—that's 27.3 tons of marine debris. This included items too large to fit in trash bags such as household appliances. Other items found were: An unopened safe in Gautier, a chandelier with bulbs on Petit Bois Island, kid's rocking horse, bed pan, dead deer, bowl with food in it, TV, dishwasher, full-size house door, sealed 55-gallon drum, tiki hut, plastic swimming pool, pillow, Swiffer sweeper, Mardi Gras beads, foam, curtain rod and silverware. The most peculiar item found was a sea turtle carcass simulator, a piece of scientific equipment belonging to the Institute of Marine Mammal Studies that had washed up on Deer Island.

During the International Coastal Cleanup, hundreds of thousands of people across the world spend three hours combing the beaches and waterways

to pick up trash that pollutes our waters, harms marine life, hampers tourism and poses health risks to beach-goers. During last year's International Coastal Cleanup, more than 598,076 volunteers worldwide removed more than 9 million pounds of debris from the ocean, rivers, lakes and waterways.

"Trash is one of the biggest threats to the health of our oceans and waterways," said Lauren Thompson, state coordinator for the Mississippi Coastal Cleanup and public relations manager for the Mississippi

Department of Marine Resources. "It's here to stay unless we change our ways. Every piece of trash picked up during the Mississippi Coastal Cleanup should be a challenge for change."

The mission of the International Coastal Cleanup is to remove debris from shorelines, bayous, bays, rivers, waterways and beaches; collect valuable information on the amount and types of debris collected; educate people on the issue of marine debris; and use the data collected to effect positive change. Volunteers clean beaches and collect information on what they find, using the International Coastal Cleanup Data Card, so that sources of marine debris can be targeted for education or pollution prevention campaigns. State coordinators provide the data from the data cards to the Ocean Conservancy in Washington, D.C. where the data is tabulated. Over the years, data from the cleanups have been used to enact local, state, national, and even international legislation and agreements.

After the Mississippi Coastal Cleanup, the Coastal Conservation Association of Mississippi and RPM/Domino's Pizza treated 360 volunteers to pizza from 11 a.m. to 1 p.m. at Jones Park in Gulfport. Cabot Cheese, Chiquita Fresh LLC, and Coast Coca-Cola Bottling Co. also provided food and drink for the event.

Continued on next page



Stephanie Rudolph of Perkinston and her 9-year-old daughter Katie clean the beach by Jones Park in Gulfport.



Fourteen members of Girl Power, a group of 7th and 8th graders with North Gulfport Middle School, cleaned the beach east of Jones Park during the Oct. 20 Mississippi Coastal Cleanup.

In Jackson County, 650 volunteers received a free barbecue lunch of pulled pork and beef brisket and chips at the Estuarine Education Center at Mississippi Gulf Coast Community College in Gautier courtesy of The Shed Barbeque & Blues Joint. Coca-Cola Bottling Co., Consolidated provided bottled water for the lunch.

In Hancock County, the Office of Congressman Steven Palazzo and the Bay St. Louis Rotary Club treated volunteers to hotdogs at a cookout held at the Washington St. Pavilion on the beach in Bay St. Louis.

Volunteers, who cleaned the beach and filled out data cards, documenting what litters our shores and waterways, also received a re-usable fold-up lunch bag, compliments of Chevron Pascagoula Refinery.

“The great turnout today and the support that the Mississippi Department of Marine Resources has received from the Mississippi Marine Debris Task Force and our more than 80 sponsors sends a clear message: Mississippians do care about their coastal environment,” Thompson said.

*2012 Results

2,545 volunteers
54,680 pounds of debris
199 miles cleaned
2,053 trash bags filled
68 total sites
15 sites collected 164 bags of recyclables
184 tires collected for recycling

Harrison County
871 volunteers
627 bags of trash
18 sites

Hancock County
318 volunteers
341 bags of trash
18 sites

Jackson County
1,000 volunteers
1,008 bags of trash
26 sites

Barrier Islands
53 volunteers
77 bags of trash
4 sites

Entanglements
a dead brown pelican on Deer Island
entangled in fishing line
with a hook through its beak

Peculiar Items Found
An unopened safe
a chandelier with bulbs
kid's rocking horse
tiki hut
dishwasher
Mardi Gras beads
a sea turtle carcass simulator

*Oct. 20 Mississippi Coastal Cleanup,
includes Oct. 10-11 Renew Our Rivers

Mississippi Marine Debris Task Force

BP; Chevron Pascagoula Refinery; City of Biloxi; City of Gautier; City of Gulfport; City of Moss Point; City of Ocean Springs; City of Pascagoula; CCA-Mississippi; Coastal Rivers; Delbert Hosemann Secretary of State; DMR Marine Patrol; Eco-Tours of South Mississippi; Grand Bay National Estuarine Research Reserve; Gulf Coast Heritage Trails Partnership; Gulf Islands National Seashore; Hancock County Beautification Committee; Hancock County Board of Supervisors; Hancock County Chamber of Commerce; Hancock County Solid Waste; Hands On Mississippi; Harrison County Beautification Commission; Harrison County Board of Supervisors; Harrison County Sand Beach Department; Harrison County Sheriff's Department; Harrison County Utility Authority; Ingalls Shipbuilding; Jackson County Board of Supervisors; Jackson County Chamber of Commerce; Jackson County Solid Waste Department; Keep Mississippi Beautiful; Keesler Air Force Base; Mississippi Air National Guard CRTC-Gulfport; Mississippi-Alabama Sea Grant Consortium; Mississippi Department of Environmental Quality; Mississippi Department of Marine Resources; Mississippi Gulf Coast Community College; Mississippi Power; Mississippi State University Coastal Research & Extension Center; Naval Construction Battalion Center; North Gulfport Community Land Trust; Northrop Grumman Electronic Systems; Office of Congressman Steven Palazzo; Rotary International District 6840; Sea Coast Echo and University of Southern Mississippi-Gulf Coast Research Laboratory.

Sponsors

SEA TURTLE: BP; Chevron Pascagoula Refinery; Matthews Brothers Inc.; Mississippi Department of Environmental Quality; Mississippi Department of Marine Resources; The Bait Box; Mississippi Power; The Shed Barbeque and Blues Joint

SHARK: Cable One Advertising; Delta Sanitation, A Waste-Pro Company; Lamar Outdoor Advertising-Mississippi Gulf Coast; Mississippi Media; Ocean Conservancy; Parents&Kids Magazine; The Sun Herald; Waste Management

DOLPHIN: Allen Beverages Inc.; Beverage Association of Mississippi; Coast Coca-Cola Bottling Co., Inc.; Coca-Cola Bottling Co., Consolidated; Fisher Safety; Milner Rental Center; RPM/Domino's Pizza; Ship Island Excursions

COBIA: Biloxi-D'Iberville Press; Cabot Cheese; CCA-Mississippi; Chiquita Fresh, LLC.; Keep Mississippi Beautiful; K99FM, Magic 93.7, 92.5 The Beat and News Radio 104.9; Kimberly-Clark Corporation Professional Division; Knight Abbey Printing and Direct Mail; Ocean Springs Gazette; Sea Coast Echo; The Dive Shop; WLOX-TV 13

MULLET: Academy Sports & Outdoors; Coast Electric

Danny Guice, Jr. named MDMR Interim Executive Director

Danny Guice, Jr. joined the Mississippi Department of Marine Resources as Deputy Director on Nov. 10, 2012. On Jan. 15, 2013, he was named Interim Executive Director.

Guice received a Bachelor's of Public Administration with a major in criminal justice from the University of Mississippi and a master's in criminal justice from the University of Southern Mississippi.

He previously served on the Mississippi Parole Board, appointed in 2008 by Gov. Haley Barbour and reappointed in 2010 by Gov. Phil Bryant. He resigned his position on Nov. 9, 2012.

Prior to his service on the parole board, Guice served in the Mississippi Legislature as a state representative (District 113) for 24 years, from 1984 through 2008.

Guice served as a justice court judge for Jackson County from 1980-1984. Prior to that he was employed as a parole officer (from 1977-1980); the first half of his tenure was for Jackson, George and Greene counties and the second half for Harrison, Stone and Hancock counties.

Guice was born and raised in Biloxi and lives in Ocean Springs with his wife, Janie Bertrand Guice. They have two sons: Danny III and Nicholas.



2013 Marine Resources calendar hi

The Mississippi Department of Marine Resources (MDMR) has chosen the winners of the 2013 calendar art contest. The featured artwork was selected from over 1,300 entries submitted by third- through sixth-grade students from 29 schools in Hancock, Harrison and Jackson counties.

Students were asked to create artwork following the theme "Preserving and Enjoying Mississippi's Coastal Resources." The 2013 calendar showcases imaginative artwork as well as useful marine information. The original artwork is currently on display in the MDMR's main lobby at 1141 Bayview Ave. in Biloxi.

Thank you to the following schools for participating in the contest:

Anniston Avenue Elementary, Bay Waveland Middle, Cedar Lake Christian Academy, Central Elementary, Cherokee Elementary, Coast Episcopal School, Delisle Elementary, D'Iberville Elementary, D'Iberville Middle, East Central Upper, Eastlawn Elementary, Hancock North Central Elementary, Harper McCaughan Elementary, Jeff Davis Elementary, Magnolia Park Elementary, Nicholson Elementary, North Bay Elementary, North Woolmarket Elementary, North Woolmarket Middle, Oak Park Elementary, Ocean Springs Middle, Ocean Springs Upper Elementary, Orange Grove Elementary, Our Lady of Fatima, Pass Road Elementary, Pecan Park Elementary, Resurrection Catholic School, St. James Catholic Elementary, St. Martin Center for Gifted Excellence, St. Martin East, St. Martin Middle, St. Martin North Elementary, St. Martin Upper Elementary, St. Vincent de Paul, Three Rivers Elementary, West Wortham Elementary, and Woolmarket Elementary.

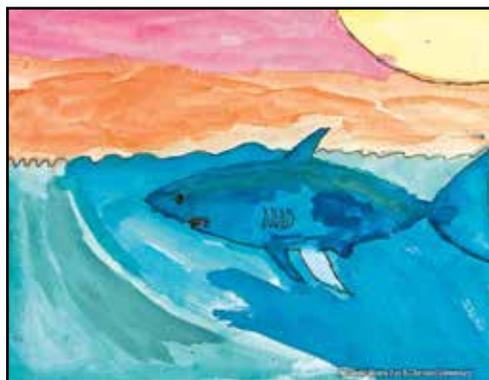
The calendar, which was printed through grants from the Sport Fish Restoration and the Tidelands Trust Fund programs, highlights MDMR programs and contains sunrise/sunset times, moon phases and tidal ranges as well as reef locations, sportfishing records and boating safety tips.



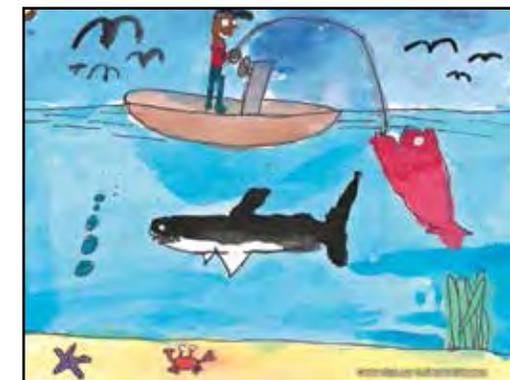
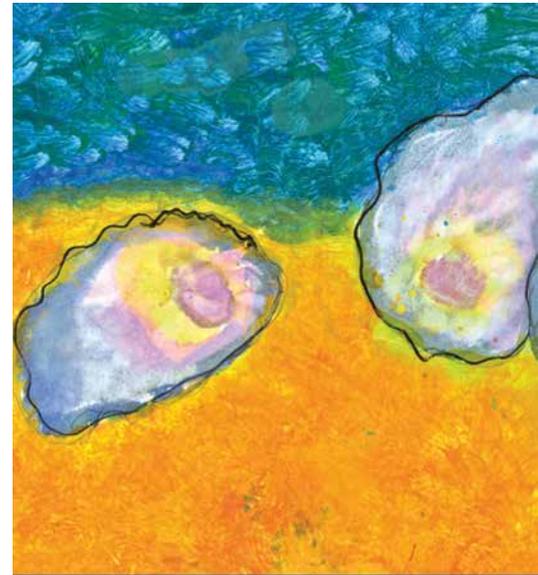
January



February



March



May



April



June

Highlights students' winning artwork



Mississippi's Coastal Resources
Department of Marine Resources
Information Calendar
 Limits • Reef Coordinates • MS Saltwater Fishing Records • Boating Safety



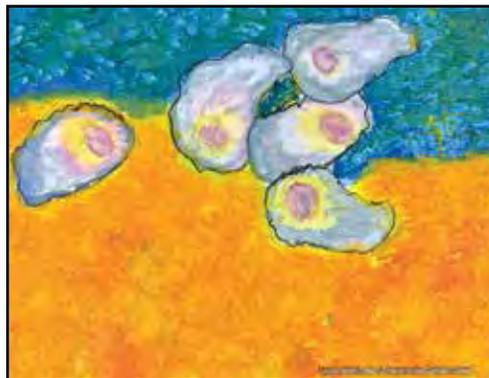
September



October



July



November



August



December

Winners of the 2013 calendar art contest are as follows:

Months:

- January, Lauren Clarke, age 9, Our Lady of Fatima
- February, Baleigh Andrews, age 9, Cherokee Elementary
- March, Alexander Moore, age 9, Cherokee Elementary
- April, Payton Bennett, age 11, Ocean Springs Upper Elementary
- May, Caroline Floyd, age 10, Cherokee Elementary
- June, Jazmin Anderson, age 10, Jeff Davis Elementary
- July, Mary Kaitlyn Jones, age 10, D'Iberville Middle School
- August, Bettina Boland, age 11, Resurrection Catholic School
- September, Landon Wiggins, age 9, Cherokee Elementary
- October, Juliana Heise, age 10, St. Martin Center for Gifted Excellence
- November, Lauren Bowlin, age 12, Resurrection Catholic School
- December, Madison McPherson, age 12, St. Martin Middle School

Front Cover:

- Lauren Bowlin, age 12, Resurrection Catholic School

Back Cover (not shown):

- From left; Layne Turan, age 11, West Wortham Elementary; Austin Rice, age 9, Our Lady of Fatima; Dalton Barnes, age 10, Hancock North Central Elementary

Please visit our website at the link below to see a list of locations where the calendars are available.

Calendars are also available at local bait shops coastwide.

dmr.ms.gov/news-a-events/publications/407-2013-marine-information-calendar

NERR Notes

Grand Bay National Estuarine Research Reserve



Marsh dwellers, marsh bird research were focus of Fall Science Seminar

The Mississippi Department of Marine Resources (MDMR) Shrimp and Crab Bureau, along with the Grand Bay National Estuarine Research Reserve (NERR), held a free seminar entitled “Marsh Dwellers” Oct. 30, 2012, at the Bolton State Building in Biloxi.

The free seminar, which is the ninth in a series of multiagency science seminars, began with a brief overview by MDMR Shrimp and Crab Bureau Director Traci Floyd and continued with presentations on tidal marsh birds, blue crabs, diamondback terrapins and salt marsh grasshoppers in Mississippi and the northern Gulf.

Dr. Mark Woodrey, a coastal ecologist with the Mississippi State University Coastal Research and Extension Center and Research Coordinator for the NERR, highlighted ongoing research focused on breeding marsh birds, in particular clapper rails and seaside sparrows. Marshes along the northern Gulf coast have some of the highest densities of marsh birds and thus understanding those factors that affect them is of critical importance.

Also speaking at the seminar were Darcie Graham, assistant director for the Center for Fisheries Research and Development at the University of Southern Mississippi’s Gulf Coast Research Lab, and Harriet Perry, the recently retired director of the center who continues to be an active and essential research leader in the Gulf. Graham discussed the ongoing study of harvest and fishing effort in Mississippi’s blue crab fishery and Perry gave an overview of the crab resource based on her years of experience.

Christina Mohrman, an estuarine ecologist and the coordinator of Research Programs/Services for the National Oceanic and Atmospheric Administration’s Environmental Cooperative Science Center at the NERR, gave a talk about the ecology and history of Diamondback terrapins, as well as current research on terrapin nesting ecology in Mississippi. Terrapins have great ecological, cultural, and historical importance.

To round out the seminar, Jessica Dean, a biology graduate student at the University of South Alabama and Eric Sparks, a graduate student in the Marine Sciences department at the University of South Alabama and Dauphin Island Sea Lab, together discussed research about salt marsh grasshoppers. These grasshoppers are the most abundant grazers of black needlerush leaves and are highly influenced by small changes in the environment. They talked about the distribution of these grasshoppers and some potential influences on their feeding behavior.



MDMR Shrimp and Crab Bureau Director Traci Floyd gives a brief overview during the fall “Marsh Dwellers” science seminar held last October at the Bolton State Building in Biloxi.

Reserve hosts Geminids Star Party

On December 14, the Grand Bay National Estuarine Research Reserve hosted its first Geminids Star Party to introduce the public to the wonders of astronomy during last year’s dazzling Geminids meteor shower. The goal of the Star Party was to teach the public how to properly observe the Geminids Meteor Shower and identify the many constellations, planets and individual stars in the winter sky at a site where the amount of light pollution was minimized. The Reserve turned off most of the lights and provided telescopes and a few amateur astronomers to coach the participants.

The guest instructor was Jeff Ehmen, an educator for the NASA Marshall Space Flight Center and father to one of the Reserve’s researchers, Brenna Ehmen. Ehmen spoke to a packed classroom during the event. Approximately 50 participants of all ages were in attendance.

“I enjoyed the opportunity to speak at the star party,” Ehmen said. “While we had some clouds to contend with, we were still able to do some observing, learn about telescopes and preview some websites that have rich content and images. Astronomy is a great hobby that can be enjoyed for all of one’s life.”

Ehmen’s daughter, Brenna, agreed. “What an exciting, inexpensive hobby,” she said. “All you have to do is look up.”



A star gazer observes the Geminids Meteor Shower Dec. 14 at the Reserve.

Cleanups held on our coastal waterways

On Oct. 10 and 11, MDMR staff participated in the annual Mississippi Power's Renew our Rivers Program to clean up our coastal waterways. On Oct. 10, cleanup efforts were focused on Gulfport Lake and Bernard Bayou. Approximately 5 tons of trash was collected on the lake and surrounding waterways. Cleanup efforts on Oct. 11 were focused on the lower Pascagoula River. About 5.5 tons of debris was removed from this river. The debris removed from the two sites consisted of treated lumber, tires, assorted plastics, appliances, and even a fiberglass derelict skiff. Much of this debris can be contributed to the impact of Hurricane Isaac. Heavy rains and high storm surge led to local flooding, which deposited large amounts of debris in the marshes and along the waterways. Future events are being scheduled to continue these efforts to keep our coastal waterways clean.



Dan Sloan (Habitat Steward volunteer) sits among a boatload of debris picked up along the Pascagoula River.



Jason Ballard (MDMR) and volunteers remove trash on the river.

Wild hog is least-wanted invasive animal

Wild hogs (also known as feral hogs) are the most common invasive animal found in the Mississippi Coastal Preserves. Large populations of wild hogs can have serious ecological impacts to our coastal habitats. They directly compete with native species like the whitetail deer and wild turkeys for food resources. They will also kill and eat whitetail deer fawns, ground-nesting birds and many other native animal species. The disturbance to the soil caused by their extensive rooting leads to increased erosion and increased invasion by non-native plants. They also harbor several diseases that can be transmitted to livestock and humans.

Wild hogs were first introduced to the United States in the 1500s by Spanish explorer Hernando Desoto. Since then they have expanded their range to at least 45 states. They are opportunistic omnivores with about 90 percent of their diet consisting of roots, plant matter and crops while the other 10 percent includes mammals, amphibians and reptiles. They have a very high reproduction rate and can reach sexual maturity in just over 6 months. Litter size averages 5-7 piglets and an adult female in good condition can produce 2 litters per year. They are capable of surviving in a variety of different habitats and have very few natural predators. Research shows that 70 percent of the population must be killed every year just to keep their numbers from increasing. Hunting and trapping are the two most effective ways for controlling their numbers. In Mississippi and most other states, wild hogs are considered a nuisance species and a serious ecological and agricultural pest. They cost the United States approximately \$1.5 billion every year in damages to agriculture and the environment. Much of the spread of wild hogs in recent years has been due to people trapping live hogs and releasing them in new areas. As a result, Mississippi and most other states have passed laws prohibiting the transport and release of wild hogs. For more information, please visit wildpiginfo.msstate.edu.



Wild hog photographed on the Wolf River Coastal Preserve.

Seafood Safety Corner



Jeff Davis



Jessica Rankin

STB staff attended several events in conjunction with schools participating in the Environmental Stewardship Program, which assists elementary schools

in the three coastal counties that were affected by Hurricane Katrina. In December, a STB staff member attended an event held by St. Martin Middle School. Students were given a lecture on oyster anatomy and given a quiz. Students then participated in an art lesson using recycled oyster shells. Bel-Aire Elementary in Gulfport hosted a grand opening of their Aquatic Science Lab. The lab contains multiple tanks containing many different animals including blue crabs and brown shrimp. In upcoming months, the STB looks forward to working with some of the other schools to see their projects to completion.

For more information on upcoming events and the STB outreach program, contact the STB's Outreach Coordinator Jessica Rankin at Jessica.rankin@dmr.ms.gov or call (228) 523-4095.

Mayor's Disability Awareness Health Fair



Children enjoy doing marine arts and crafts at MDMR Seafood Technology Bureau exhibit at the Mayor's Disability Awareness Health Fair held at Edgewater Mall in Biloxi October 13.

The end of the 2012-2013 fiscal year is quickly approaching and MDMR inspectors are conducting quarterly inspections at certified seafood processing facilities. With the cold weather, it is important that seafood dealers maintain their facilities and verify that their equipment works properly. Severe cold weather can cause pipes to freeze and processing equipment will not work properly if this happens.

Inspections during the fourth quarter are very important because these inspections will determine whether or not seafood dealers will be recertified for the next fiscal year. In order for seafood facilities to pass inspection, they must meet certain criteria. Seafood dealers and processors must have an active HACCP Plan on file and have no critical deficiencies. Coincidentally, they cannot have more than two key and two other HACCP deficiencies and no more than two key and three other sanitation deficiencies. Therefore, seafood dealers and processors must verify that any previous deficiencies from prior inspections are corrected. Once seafood dealers and processors pass their inspection, they must renew their license. If no license is purchased, a certificate will not be issued to the facility, and the facility will not be allowed to operate.

Last fall, the Seafood Technology Bureau (STB) participated in outreach events all across south Mississippi with attendance reaching in the thousands. In October, the annual Mullet Festival was held in Jackson County, which included a mullet tossing contest. The STB talked to attendees about our marine resources and being good stewards to our environment. The Jackson County Fair was also held in October and was a huge success. In November, STB staff helped honor our veterans by attending the Veteran's Day parade in Gulfport.



St. Martin Middle School science students Courtney Mamboweninga, left, and Connor Shelby, take a quiz on oyster anatomy last December following a talk given by MDMR Seafood Officer Jessica Rankin.



Take a Bow

Recognizing employees' commitment to excellence

MDMR staff help educate youth at Conservation Education Field Day

MDMR's Office of Fisheries participated in the Harrison County Conservation Education Field Day for fourth-grade students at the Sheriff's Department County farm. The event, which was organized by the Harrison County Soil and Water Conservation District, was a huge success, with 26 classes and close to 600 students attending the two-day educational event. MDMR staff Doug Drieling, Ruth Posadas and Jill Zednick attended the event. MDMR staff also participated in and represented the agency in a similar event for fourth-grade students at the Jackson County Field Day in Vanclave.



Fourth-graders get an up-close look at fish and other marine life at the MDMR booth during the Conservation Education Field Day held in Harrison County last fall.

Teachers explore coastal hazards and resilience

In July, the Mississippi Department of Marine Resources' Shellfish Bureau held a research excursion for MSU's Summer Teachers Workshop "Teachers Exploring Coastal Hazards and Resilience." The goal was to introduce and engage the science teachers in information about Mississippi Sound oyster reefs including hands-on activities. The excursion took place on the R/V Conservationist, the MDMR Shellfish Bureau's 65-foot Biloxi oyster lugger. The boat, which was built in 1974 by the Covacevich Boat Yard in Biloxi, is used to monitor oyster reefs, relay oysters from one area to another and to cultivate the oyster reefs. It is also used as a mobile education lab and to transport oyster industry and state representatives to view conditions of the reefs. The R/V Conservationist carried the teachers to the Pass Christian oyster reef where the crew dredged for oysters. The Shellfish Bureau staff members aboard helped each willing teacher shuck an oyster. The anatomy of the oyster was then discussed. Following the shucking project, Marine Scientist John Mitchell held an informative presentation on all things oysters. Information presented to the group included: how the oyster reefs are managed, what environmental and anthropogenic factors impact oyster health, anatomy of an oyster, economic impact of the oyster industry as a contributor to the coast economy, and sustainability.

Happy Anniversary!

These anniversaries mark employees' years of service with the MDMR. We thank them for their dedicated service to the management of our marine resources.

Scott Gordon	10/01/97	Tamra Carrell	11/03/04
Barbara Synowicz	10/01/99	Kimberly Denz	11/08/04
Paul Grote	10/01/00	Danny Guice, Jr.	11/10/12
Scott Anderson	10/01/01	Jay McIlwain	11/19/07
Jack Ewing	10/01/01	Debbie Snawder	11/30/09
Patrick Levine	10/01/01	Traci Floyd	12/01/97
Dave Ruple	10/01/02	Mike Walker	12/01/97
Paul Elmore	10/01/09	Brandon Hall	12/01/98
Bryan Wallace	10/01/09	Brenna Ehmen	12/01/12
Irvin Jackson	10/12/98	Kerwin Cuevas	12/02/96
Teresa Stadler	10/18/04	Joe Jewell	12/08/97
Kara Vesa	11/01/96	Brittany Chudzik	12/13/04
Tina Johnson	11/01/97	Curtis Culpepper	12/19/05
Bill Richardson	11/01/98	Matt Kasovich	12/19/05
Beth Roberts	11/01/99	Roy Lipscomb	12/20/06
Scott Chatham	11/01/00	Mario Sapet	12/22/03
Tommy Jennings	11/01/00	Mai Dang	12/22/07
Chris Mask	11/01/00	Robin Vaughn	12/23/06
Kyle Wilkerson	11/01/00	John Ladner	12/29/05
Patrick Carron	11/01/09	Ali Leggett	12/29/05

Thanks!

to all who contributed to this issue of Coastal Markers:

- Donnie Armes, Tim Broder,
- Kristina Broussard, Jeff Clark, Jeff Davis,
- Dr. Fred Deegen, Brenna Ehmen,
- Traci Floyd, Brooke Goff,
- Scott Gordon, Joe Jewell,
- Christina Mohrman, Sandra Moore,
- Rusty Pittman, Ruth Posadas,
- Bradley Randall, Jessica Rankin,
- David Rose, Dave Ruple, Amy Taylor,
- Travis Williams



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MDMR Calendar

February 19

Mississippi Commission on Marine Resources meeting, Bolton Building, 1141 Bayview Ave., Biloxi, 9 a.m.

March 19

Mississippi Commission on Marine Resources meeting, Bolton Building, 1141 Bayview Ave., Biloxi, 9 a.m.

April 6

Celebrate the Gulf Marine Education Festival, War Memorial Park, Pass Christian, 10 a.m.-3 p.m. For information, call Jennifer Buchanan at 228-475-7047.

April 16

Mississippi Commission on Marine Resources meeting, Bolton Building, 1141 Bayview Ave., Biloxi, 9 a.m.

April 22

Earth Day



To learn more about Mississippi Coastal Cleanup scan the QR code or visit mscoastalcleanup.org.



To sign up to receive your Coastal Markers via e-mail, go to dmr.ms.gov/news-a-events/newsletters



Celebrate the Gulf Marine Education Festival, April 6, 2013

Doc's Fishing Tip

When the weather's cold, a fish's metabolism slows and so should your retrieve: Fish a soft plastic jig low and slow for best results this time of year as the fish will usually be near the bottom, and they won't be much inclined to chase a fast-moving bait... That said, on a warm winter day you can still catch them near the surface; and such days are really special. There's nothing quite like taking a big mid-winter trout on a topwater bait to stir your holiday spirit!



Until next time, good fishing! — Dr. Fred Deegen

Illustration: Joe Jewell

Mississippi Gulf Seafood Gumbo

- 8 oz Mississippi Gulf shrimp, peeled
- 8 oz Mississippi Gulf claw crabmeat
- 4 each chicken legs, skin on
- 6 oz smoky sausage
- 2 stalks celery, chopped
- 1 each bell pepper, chopped
- 1 each large onion, chopped
- 1 14.5-oz can diced tomatoes
- 1 10-oz can Rotel Hot
- 2 tbsp tomato paste
- 4 tbsp vegetable oil, divided
- 8 oz okra, sliced
- 1 10.5-oz can chicken giblet gravy
- Tabasco to taste
- 3 tbsp flour
- 1-2 tbsp filé
- salt, to taste
- pepper, to taste

Heat a Dutch oven over medium-high heat. When hot, add the chicken and sausage, and cook until golden brown. Add celery, onion, bell pepper and let brown with meat. Add just enough water to cover, stirring up all the brown bits from the bottom, and add tomatoes, Rotel Hot and tomato paste. Reduce heat to just a simmer and cook until chicken is cooked through, 12-15 minutes. Remove chicken from pot, let cool and remove meat from bone. In a skillet over medium-high heat, add 1 tbsp oil and the okra, and sauté until just golden, then transfer to the Dutch oven. In a skillet (cast iron if possible) over medium-high heat, add 3 tbsp oil and flour and let cook, stirring constantly, until golden in color. Whisk in giblet gravy and roux to the pot; season with filé, Tabasco, salt and pepper and let cook 15 minutes. Add shrimp, crab meat and chicken. Cook 10 minutes, then taste and adjust seasoning, adding filé to taste. Serving Suggestion: Serve over rice.



For more recipes visit MSSeafood.com