



## **Research Focus: A Modeling Study Predicts the Impacts of Diversions and Sea-level Rise on Eastern Oyster Growth**

LSU's Department of Civil and Environmental Engineering with the Louisiana State University Agricultural Center; U.S. Geological Survey (USGS), Louisiana Fish and Wildlife Cooperative Research Unit; and USGS, National Wetlands Research Center, have been working on a research project to understand the impact of changes in water flow or level on oysters.

Mississippi River diversions could affect estuarine water quality such as salinity, chlorophyll a concentration and total suspended solids. Meanwhile, sea-level rise could increase flooding levels and estuarine salinity. Water quality, especially salinity, plays a critical role in oyster growth and survival.

Louisiana Sea Grant has sponsored the study to develop a model including water level and flow, water quality and oyster population in Breton Sound Estuary. Model results indicated that the size and location of the optimal oyster growth/production zones would be affected dramatically by large river diversion (250,000 cfs) and high sea-level rise (1.44 m over the next 50 years). The size would be reduced and the location would move seaward under the large Mississippi River diversion. Relative sea-level rise would benefit oyster growth and production in areas with lower salinities.

**- Hongqing Wang and Julie Lively**

## **2015 Louisiana Chapter of the American Fisheries Society**

The Louisiana Chapter of the American Fisheries Society hosts an annual meeting to facilitate information exchange among fisheries professionals and students throughout the state. The annual meeting provides a great opportunity for fisheries students to gain professional experience. The 2015 annual meeting was held May 28-29 at the Louisiana Department of Wildlife and Fisheries Building in Baton Rouge. Topics included anything related to freshwater or marine fisheries in the state, including red snapper, cocahoe, oil impacts, crawfish, oyster reefs, red drum, blue crab and spotted gar.

Awards were presented to graduate students in three categories: abstracts, posters and talks. The winner for abstract awards were David B. Reeves (Louisiana State University): Oil and gas platforms



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provide refugia for stone crabs (*Menippe* spp.) living within the northern Gulf of Mexico's hypoxic zone (1<sup>st</sup> place); Erica N. Rottmann (*Southeastern Louisiana University*): Expanding detection capabilities of fishes in Louisiana: An integrative eDNA approach (2<sup>nd</sup>); and Christopher A. Levron (*Nicholls State University*): Habitat-specific life history variation in the Gulf pipefish, *Syngnathus scovelli* (3<sup>rd</sup>).

In the poster category, the winners were Heidi R. Olivier (*Louisiana State University Agricultural Center*): Acute toxicity of FA-GLU, a microbial based biosurfactant, on larval gulf killifish (*Fundulus grandis*) (1<sup>st</sup>); Arnaud Kerisit (*University of New Orleans*): Community composition of aquatic invertebrates in natural and artificial estuarine passes of Lake Pontchartrain, Louisiana (2<sup>nd</sup>); Damon Morse (*University of New Orleans*): Dispersion of non-native channeled apple snails (*Pomacea* spp.) in Jefferson Parish, Louisiana, 2014 (3<sup>rd</sup>).

The top three winners for oral presentations were Savannah Michaelson (*Southeastern Louisiana University*): Genetic structure and migration patterns of red drum (*Sciaenops ocellatus*) in the northern Gulf of Mexico (1<sup>st</sup>); Barclay T. Pace (*Louisiana State University Agricultural Center*): Infectivity pattern of white spot syndrome virus (WSSV) in the Louisiana red swamp crayfish (*Procambarus clarkii*) (2<sup>nd</sup>); and Erica N. Rottmann (*Southeastern Louisiana University*): Expanding detection capabilities of fishes in Louisiana: An integrative eDNA approach (3<sup>rd</sup>). For more information or to see summaries of all the research, visit <http://sdafs.org/laafs/meetings/>.

- Julie Lively

## LOUISIANA REGULATIONS

### Spring Shrimp Season

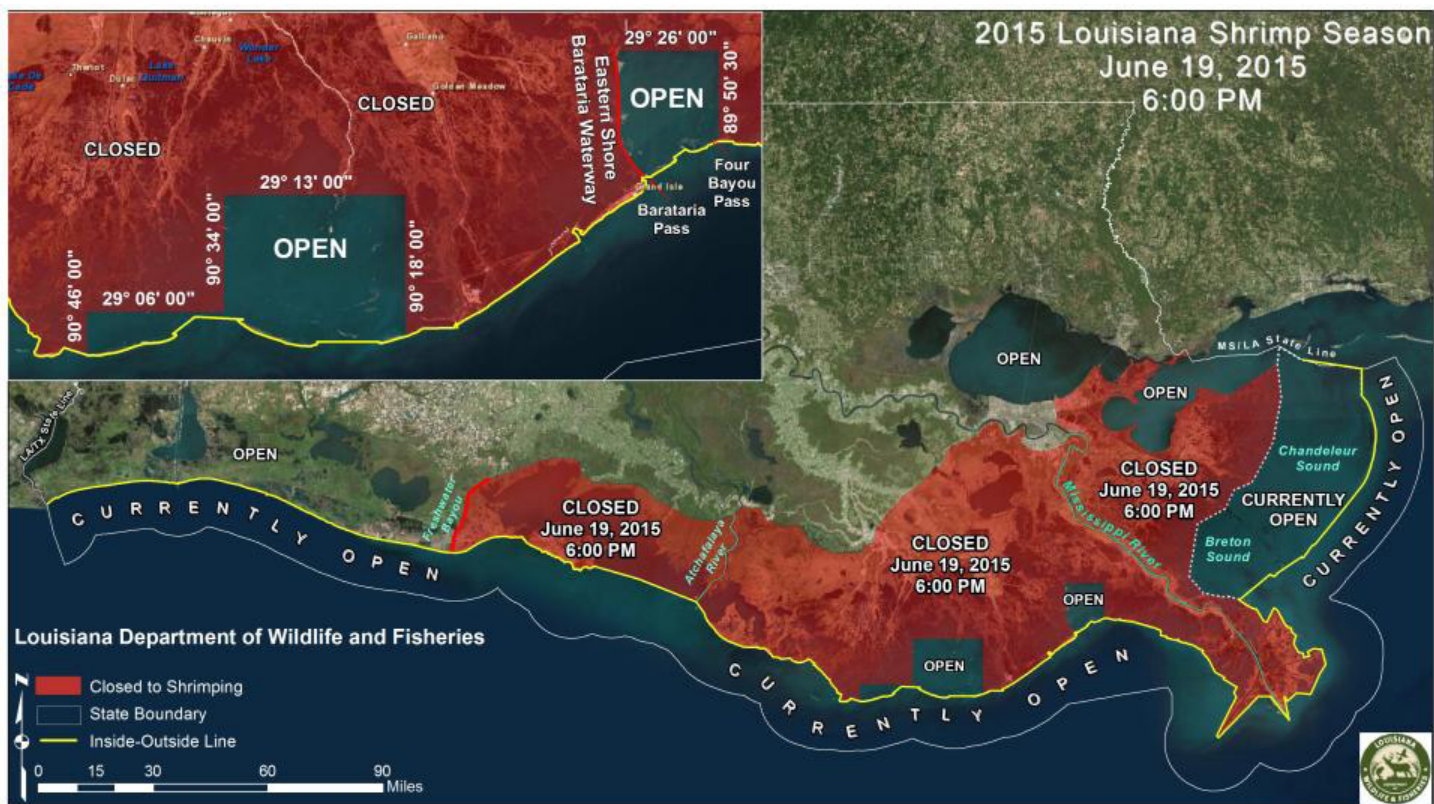
The 2015 spring inshore shrimp season closed on Friday, June 19, from the Mississippi/Louisiana state line westward to the western shore of the Freshwater Bayou canal except for some waters (see map):

All remaining state inside waters as well as all state outside waters seaward of the Inside/Outside Shrimp Line, as described in R.S. 56:495 will remain open to shrimping until further notice.

The spring season for harvest of shrimp in inside waters of the state has been one of the shortest on record. Data collected in recent weeks by Louisiana Department of Wildlife and Fisheries (LDWF) biologists indicate increased quantity, distribution and percentage of small, juvenile white shrimp within these waters. The decision to close these waters was made to protect these developing shrimp and provide opportunity for growth to larger and more marketable sizes.

Recognizing the impact of such a short season in these waters on harvesters and related industries, LDWF Secretary Robert Barham has authorized certain restricted open water areas of Barataria and Terrebonne/Timbalier Bays to remain open at this time. The intent is to provide additional opportunity for harvesters to continue harvest in areas where white shrimp are somewhat less abundant and somewhat larger than in the interior marshes.

There is a possession count on saltwater white shrimp taken in either inside or outside (offshore) waters of Louisiana of 100 count (whole shrimp per pound). This size restriction applies to the taking or possession of such shrimp aboard a vessel, except during the period from Oct. 15 through the third Monday in December, when there shall be no possession count on saltwater white shrimp taken or possessed. When more than 50 percent by weight of the saltwater shrimp taken or possessed is seabobs or brown shrimp, then the maximum allowable amount of undersized white shrimp taken or possessed shall not exceed 10 percent by weight of the total saltwater shrimp taken or possessed. If compliance issues develop, then the remaining open areas can be closed.



Map Courtesy of LDWF.

## Recreational Red Snapper Season Remains Open in Louisiana State Waters

After a 10 day federal red snapper season that ran from June 1 through June 10, the Louisiana Department of Wildlife and Fisheries wants to remind recreational anglers that the season for the recreational harvest of red snapper in Louisiana state waters remains open.

On March 20, 2015, the Louisiana Department of Wildlife and Fisheries opened the Louisiana red snapper season in Louisiana state waters seven days per week until further notice. The bag and possession limit for the state-waters season is two fish per person at a 16-inch minimum total length.

## Lagniappe Fisheries Newsletter

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## License to Win! Promotion

Louisiana has some of the most knowledgeable, die-hard, fishing fanatics in the world, who have continually supported the Department of Wildlife and Fisheries' programs and management efforts through the purchase of their annual saltwater fishing license. Launching June 1, the *License to Win!* Sweepstakes is LDWF's way of saying thank you to its anglers for their unfettered support.

In partnership with the Louisiana Wildlife and Fisheries Foundation and a host of other sponsors, Louisiana anglers will be rewarded in monthly drawings for YETI ice chests, Shimano gear, and gift cards from Whole Foods, Academy Sports and Outdoors and Texaco. One lucky angler will take home the grand prize, a 22-foot bay boat, trailer and motor donated by Venice Marina, Mercury Outboards and Mike Gerald's Trailer Depot.

Qualification is simple:

1. Buy a Louisiana saltwater fishing license
2. Provide an accurate email address (phone number if email not available)
3. Respond to the verification email or phone call to validate your contact information

## New Rules Take at Port Eads Marina

New rules are approved that would allow fishermen who stay overnight at Port Eads Marina, located in Plaquemines Parish, to clean their catch on site and transport fileted fish to land-based ports in Louisiana. Catch inspections and certifications, which can only be issued when LDWF staff is on site at Port Eads, would allow for fishermen to possess and transport up to a 3-day daily creel limit. These new rules were adopted due to the remote nature of the Port Eads Marina, and since the marina is only accessible by water.

When a certifying agent is present, recreational anglers may seek inspection and certification provided the fisherman is in compliance with the following requirements:

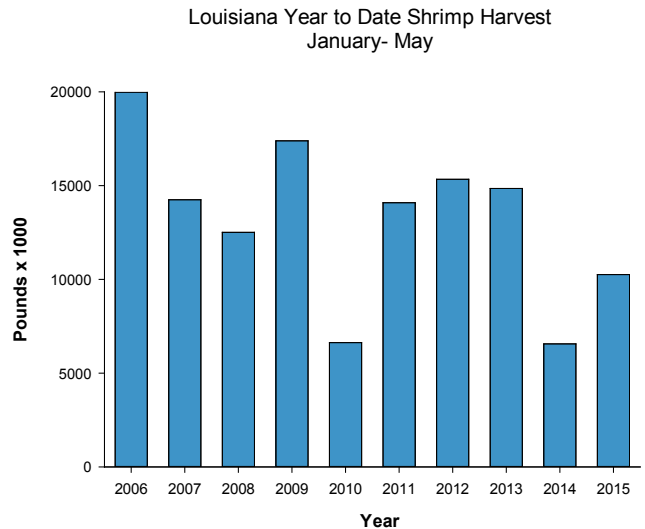
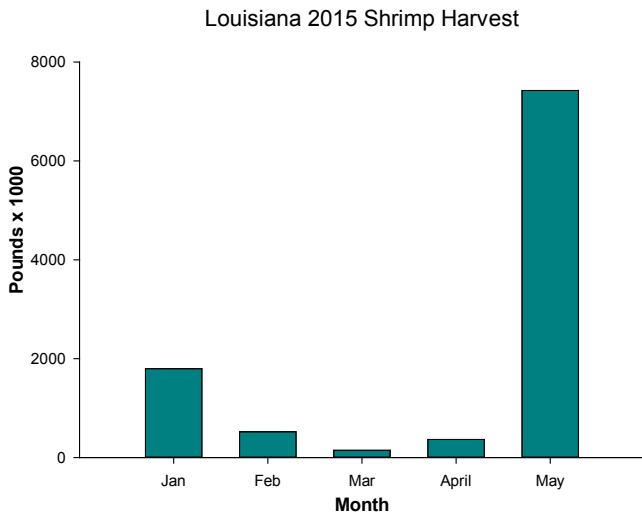
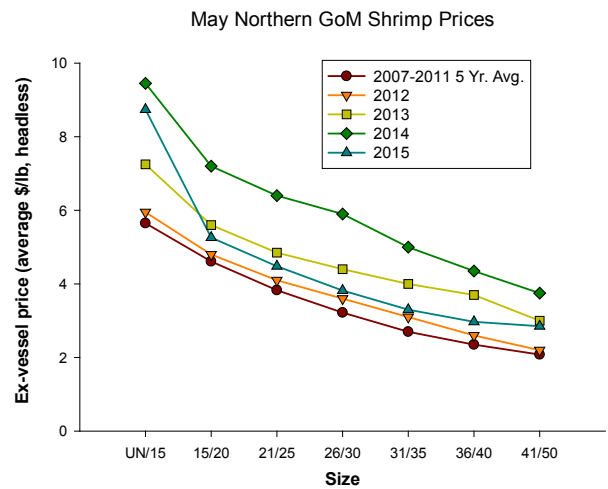
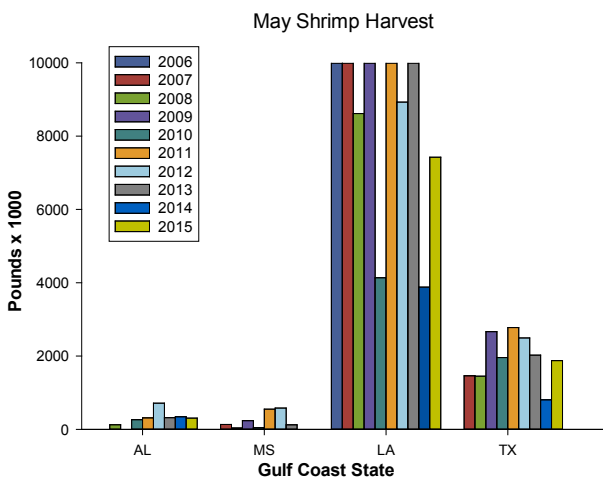
1. The fisherman holds and is in possession of all current recreational fishing licenses required.
2. The fisherman is in possession of and can provide a receipt issued by the Port Eads Marina facility that demonstrates, to the satisfaction of the department, an overnight stay at the Port Eads Marina facility.
3. Catches can only be inspected and certified for days on which LDWF staff is present at the facility. Upon landing his or her daily catch at the Port Eads Marina, the fisherman will contact LDWF staff on duty at the marina so that the catch can be inspected to ensure that the species, size and daily creel are within legal limits. Following inspection, fish can be fileted and must be marked with catch certification tags that will be provided by the certifying agent.
4. Once certified, the fishermen will be issued an interview form and bag tags for all bags of fish that correlate with an individual angler's catch. No active fishing can take place on board a vessel transporting bags of certified catch.

5. The fisherman is only in possession of his or her fish and shall not transport fish taken by another person back to the boat landing.

When a LDWF certifying agent is not present, fishermen should adhere to the state-wide regulations on water possession limits. For more information on the rules and a list of future dates when a certifying agent will be at the marina visit [www.fishla.org/port-eads-marina-regulations](http://www.fishla.org/port-eads-marina-regulations)

### Louisiana Shrimp Watch

Louisiana specific data portrayed in the graphics are selected from preliminary data posted by NOAA on its website. All data portrayed are subject to final revision and approval by NOAA. Shrimp landings are ex-vessel prices, inclusive of all species harvested. Missing, inadequate or withheld reports are portrayed as “zero” in these graphics. Price graphics reflect central Gulf states only (Texas and Florida are reported independently). For more information, please refer to: [www.st.nmfs.noaa.gov/st1/market\\_news/index.html](http://www.st.nmfs.noaa.gov/st1/market_news/index.html).



## Fish Gear Incident Sites - May 2015

In accordance with the provisions of R.S. 56:700.1 et. seq., notice is given that eight claims in the amount of \$32,485.96 were received for payment during the period May 1-31, 2015. There were eight paid and zero denied.

Latitude/Longitude Coordinates, in Degree Decimal Minutes, of reported underwater obstructions are:

29 04.902	90 11.607	LAFOURCHE
29 07.445	89 27.168	PLAQUEMINES
29 25.494	90 32.412	TERREBONNE
29 30.571	92 21.895	VERMILION
29 40.500	89 46.000	PLAQUEMINES
29 55.977	93 20.363	CAMERON
30 03.475	89 22.376	SAINT BERNARD

A list of claimants and amounts paid can be obtained from Gwendolyn Thomas, administrator, Fishermen's Gear Compensation Fund, P.O. Box 44277, Baton Rouge, LA 70804, or call (225) 342-9388.

## UPCOMING EVENTS:

*Larose Commercial Shrimp and Crab Fishermen Dock Day*, Aug. 5, 2015, 9 a.m.-Noon  
Larose Regional Park and Civic Center Pavilion, 307 E 5th St., Larose, LA 70373  
<http://lafisheriesforward.org/events-page/fisheries-workshop-in-larose/>  
or for more information, contact: Alan Matherne or Julie Falgout (985) 873-6495

Oil Spill Workshops or Seminars:

*Impacts of Oil on Coastal Habitats Seminar*, July 22, 2015, 1-4:30 p.m.

Florida Department of Environmental Protection, 13051 North Telecom Parkway, Temple Terrace, FL 33637

*Navigating Shifting Sands: Oil on our Beaches Seminar*, Aug. 5, 2015, 9 a.m.–5 p.m.

J. Earle Bowden Building, 120 Church St., Pensacola, FL 32502

*Impacts of Deepwater Horizon Oil Spill to Gulf Wetlands*, Aug. 11, 2015, 9 a.m.–4 p.m.

Slidell Municipal Auditorium, 2056 Second St., Slidell, Louisiana 70460

For more information please visit <http://gulfseagrant.org/oilspilloutreach/presentations.>

## The Gumbo Pot

### Crab Rémoulade Salad

Recipe courtesy of *Louisiana Kitchen & Culture*. For more recipes or to subscribe to their magazine or free newsletter, please visit <http://louisiana.kitchenandculture.com/>.

#### Ingredients:

1 lb. Louisiana jumbo lump crab meat, picked over  
Rémoulade dressing (see below)  
salt and pepper  
1 head iceberg lettuce, shredded  
Green tomato relish  
1 cup chives, snipped

#### Rémoulade dressing Ingredients:

1 small onion, roughly chopped  
1 rib celery, roughly chopped  
2 cloves garlic, peeled  
3 green onions, roughly chopped  
1/4 cup fresh parsley leaves, loosely packed  
2 tablespoons prepared horseradish  
1/2 cup mayonnaise  
1/4 cup freshly squeezed lemon juice  
3 tablespoons Creole mustard  
3 tablespoons ketchup  
1 tablespoon Worcestershire sauce  
salt, pepper, Louisiana style hot sauce



Photo Courtesy Louisiana Kitchen and Culture

#### Method:

**Rémoulade Dressing:** Combine onion, celery, garlic, green onion, parsley, and horseradish in a food processor; pulse until finely chopped, but not smooth, scraping down sides as needed. Spoon mixture into a medium mixing bowl. Add mayonnaise, lemon juice, Creole mustard, ketchup, and Worcestershire. Whisk until smooth. Taste; adjust seasoning with salt, pepper, and hot sauce. Cover and chill until needed, preferably overnight.

**Crab Salad:** In a medium-sized bowl, gently toss crab meat with 1 cup Rémoulade dressing. Taste, adjust seasoning with salt and pepper. Set aside. Divide lettuce among 4 chilled plates. Evenly spoon dressed crab atop lettuce. Garnish each with 1 tablespoon Green Tomato Relish; divide snipped chives among plates.



**For more information, contact your local extension agent:**

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**Research and Extension Programs**

Agriculture  
Economic/Community Development  
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Families/Nutrition/Health  
4-H Youth Programs

We would like to hear from you! Please contact us regarding fishery questions, comments or concerns you would like to see covered in the Lagniappe. Anyone interested in submitting information, such as articles, editorials or photographs pertaining to fishing or fisheries management is encouraged to do so.

**Please contact Lagniappe editor Julie Anderson Lively at [janderson@agcenter.lsu.edu](mailto:janderson@agcenter.lsu.edu).**

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