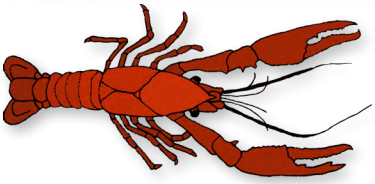

The prolonged drought of 2023 had a large impact on Louisiana's agricultural production and will have impacts into 2024 and beyond. One industry sector that will be widely affected are Louisiana's crawfish farmers and producers. While the impact of the drought can only be estimated, what we do know is that Louisiana's crawfish fishery is largely variable based on the weather from the previous year. In 2014, Louisiana Sea Grant Extension agent Kevin Savoie wrote an article on this very topic in Chenier Ecology *in an article titled "Cold Weather Crawfish".*

Cold Weather Crawfish

Louisianans associate Mardi Gras and early spring with eating crawfish. It has become a tradition and a part of our rich culture. However, through early March of 2014, crawfish have been in short supply, therefore very expensive. The culprit is prolonged cold winter temperatures. During normal winters, water temperatures dip into the 50's with the passage of cold fronts, but quickly rebound into the 60's with the return of warmer days between fronts. During these warm-up periods, crawfish become active, feed and grow through molting. This winter we did not have breaks between fronts allowing water temperatures to warm. Crawfish, being cold-blooded animals are not very active in water temperatures below 60 degrees. When water temperatures fall below 60, crawfish become almost dormant, not moving, feeding or growing very much.

Crawfish will eat almost anything including living and decomposing vegetation, seeds, algae, microorganisms, and a myriad of aquatic insects, invertebrates and small fish. Although vegetation is the most abundant food source in crawfish ponds, it is thought to contribute little to the direct nourishment of crawfish. Nutrition comes from the microbial rich organisms found colonizing dead and decaying plant and animal matter (detritus) in aquatic environments. While detritus sustains most natural, aquatic food chains, the really high-quality protein and energy rich foods required to maximize crawfish production comes from consuming animal matter such as insects, insect larvae, worms, snails, fish, etc. These organisms are commonly found in detrital rich aquatic environments. When water temperatures are this low, the entire aquatic ecosystem is slowed down.


Crawfish burrow into the ground during the drier months of the summer.

Spring crawfish production has many variables which affect the timing, and volume of production. One of the most important environmental variables is summer rainfall. In most situations, crawfish burrow into the ground during the drier months of the summer. They will burrow as deep as they have to in order to maintain water and humidity in the burrow. Frequently, this is also when crawfish reproduce the following spring's crop. As long as there is ample rainfall, soil moisture ensures good survival of the brood and adults. However, during dry summers the crawfish must burrow deeper into the ground seeking water. This reduces survival because of lack of moisture over the crawfish's gills and the extra energy required expanding burrows which sometimes collapse.

For this season as days become longer and water temperatures rise into the 60's and 70's crawfish will become more active, and supplies should pick up. Most folks in the crawfish industry believe we will have a decent crawfish season; it may just be delayed a few weeks.

A very wise crawfish farmer told me once, "One sure thing about crawfish production; it's unpredictable".

Sea Grant LOUISIANA

A Joint Publication of Louisiana Sea Grant and LSU AgCenter

LSU AgCenter Research · Extension · Teaching

Free Required Bowfishing Permit for Private and Charter Anglers Required Starting Jan. 1, 2024

A recreational saltwater bowfishing permit for both the private and charter sectors of the recreational fishery have been required since Jan. 1, 2024. The permit is free of charge and will be valid one year from the date issued. The permit can be obtained only online through the Louisiana Department of Wildlife and Fisheries' (LDWF) website.

Individuals 18 years of age or older taking or attempting to take saltwater recreational fish with bowfishing gear in the waters of Louisiana, or engaging in bowfishing activity below the saltwater line, will be required to hold this mandatory permit.

Any person on a charter bowfishing trip, who pays a fee for that trip, is not required to have this permit, but the permit is required for the captain of that charter vessel.

To effectively manage important saltwater recreational species, LDWF needs to define the universe of anglers harvesting saltwater species or species available in the saltwater areas of the state utilizing bowfishing gear.

Louisiana Wildlife and Fisheries Commission Approves Notice of Intent to Establish Possession Limits for Multi-Day Charter Boat Trips

The Wildlife and Fisheries Commission passed a notice of intent to establish multi-day possession limits for spotted seatrout and red drum while on a multi-day charter boat fishing trip. The rule will allow recreational fishermen on multi-day charter trips the same possession limits as other recreational anglers who are operating from their on-water camps along the coast.

The possession limit as proposed by this rule would be three times the daily bag limit for red drum and spotted sea trout if the fisherman can:

1. Provide a receipt from the licensed charter guide showing payment and dates of the multi-day charter trip,
2. Demonstrate to the satisfaction of the department that the fisherman has been on a multi-day charter fishing trip, and
3. Demonstrate that the fisherman has been actively on the water or at a remote camp that can be accessed only by water for two days or more.

The fish shall be kept whole or whole gutted in separate bags for each species of fish and should be marked with:

- The date the fish were taken,
- The species,
- The number of fish contained in the bag, and
- The name and license number of the person taking the fish.

The fish shall only be in the possession of the person who took the fish. Fishermen who meet these provisions may possess more than the daily bag limit on the water for purposes of transportation, however, no fisherman shall be actively fishing or engaged in fishing while in possession of more than the daily bag limit.

No charter guide and/or deckhand may keep any limit of red drum or spotted seatrout when operating or conducting trips subject the provisions this rule.

NOAA Fisheries Seeks Volunteers for Research Study to Modernize Shrimp Data Collection in the Gulf of Mexico

NOAA Fisheries and the Gulf States Marine Fisheries Commission are seeking volunteers to assist with an effort to modernize commercial shrimping effort data collection. Participants will serve as early adopters of a new monitoring system on their vessels at no cost. The new system is intended to increase the quality and efficiency of data collection related to the Gulf of Mexico shrimp fleet.

Overview and Benefits of the New System:

● The new system involves the installation of cellular Vessel Monitoring System units on board vessels with Gulf of Mexico Shrimp Permits. The new devices will transmit data directly to the Southeast Fisheries Science Center via cellular networks. This will allow scientists to estimate shrimping effort more accurately and efficiently.

● Shrimp effort data was historically logged through a cellular electronic logbook system on selected vessels that transmitted position and vessel speed data using a 3G cellular network to NOAA Fisheries' scientists. Since 3G cellular technology was shut down in December 2020, shrimpers have been physically sending memory cards to NOAA Fisheries for data retrieval. The new devices will result in more efficient data transmission.

● The new devices can also provide direct benefits to the shrimping industry. Depending on the device installed, shrimp vessel owners can choose to access applications that allow them to observe the position of their vessel(s) in near real-time when in cellular range, and save them for later comparison.

Data Collected from the Devices:

● The new devices record time-stamped vessel position every 10 minutes in order to determine how much time is spent towing nets versus steaming to fishing grounds, which is converted to an estimate of effort (tow days). These effort data are used directly in stock assessments to better manage shrimp and other fisheries.

● Position information helps scientists identify important shrimping grounds that need to be taken into consideration in marine spatial planning to avoid conflicts with other ocean industries like wind energy and aquaculture.

How to Sign Up:

The new devices are now available at no cost to Gulf of Mexico Shrimp Permit holders. The program will cover the cost of a limited number of new units, installation and maintenance and two years of cellular service for the device. The program is seeking volunteers through Sept. 30, 2024. Support through the early adopter program is available on a first-come, first-serve basis.

The Gulf States Marine Fisheries Commission has contracted with LGL Ecological Research Associates, Inc. to coordinate the early adopter phase of this effort modernization project.

Early adopters must possess a Gulf of Mexico Shrimp Permit. Interested parties should contact LGL Ecological Research Associates:

Nathan Putman
Email: ***nputman@lgl.com***
Cell: 205-218-5276
Office: 979-846-7000

NOAA Announces Greater Amberjack Commercial Trip Limit Reduction: Effective January 1, 2024

NOAA Fisheries is implementing an emergency regulation to reduce the commercial harvest rate of Gulf of Mexico (Gulf) greater amberjack. The Gulf of Mexico Fishery Management Council requested NOAA Fisheries take emergency action while a Framework Action to modify commercial trip limits is being reviewed and considered for implementation.

The most recent population assessment indicates Gulf greater amberjack is overfished (the population is too low) and is undergoing overfishing (too many fish being caught).

This Emergency Rule reduces the commercial trip limit to seven greater amberjack from the current trip limit of 1,000 pounds gutted weight with a step-down to 250 pounds gutted weight when 75 percent of the commercial annual catch target (or commercial quota) has been harvested.

This change is being made to reduce the catch rate of greater amberjack by the commercial sector and extend the commercial fishing season.

Summary of Change:

The Gulf greater amberjack commercial fishing year begins on Jan. 1. The Emergency Rule reduces the commercial trip limit to seven fish.

This Emergency Rule will be effective for 180 days, or until it is superseded by a final rule implementing the Framework Action that is currently under review by NOAA Fisheries. This Emergency Rule will not be extended.

The modification to the commercial trip limit is necessary to reduce the harvest rate of Gulf greater amberjack and extend the fishing season. The Emergency Rule is expected to extend the commercial greater amberjack fishing season into June 2024 when it is estimated that the commercial quota will be met, and a closure of the commercial harvest will occur.

Frequently Asked Questions (FAQs)

What will the Emergency Rule for Gulf greater amberjack do?

The Emergency Rule will reduce the Gulf greater amberjack commercial trip limit to seven fish (estimated 210 pounds gutted weight) from the current trip limit of 1,000 pounds gutted weight with a step down to 250 pounds gutted weight when 75 percent of the commercial quota has been harvested.

Why did the council request the Emergency Rule?

The final rule for Amendment 54 to Fishery Management Plan for the Reef Fish Resources in the Gulf of Mexico, which was implemented in June 2023, drastically reduced the catch levels for Gulf greater amberjack.

The commercial fishing season for Gulf greater amberjack, which begins on Jan. 1, is expected to be very short each year under the current trip limit; therefore, the council developed a Framework Action to reduce the trip limit to extend the fishing season.

Commercial landings exceeded the commercial annual catch limit in 2023, requiring NOAA Fisheries to further reduce the 2024 catch limits by the amount of the overage.

The council approved the Framework Action at their October 2023 meeting; however, if implemented, the new trip limit of seven fish is not expected to be effective until spring 2024.

Thus, the council requested an Emergency Rule that would be effective on Jan. 1, 2024, to reduce the trip limit to seven fish in accordance with what would be specified in the Framework Action to reduce harvest rates and extend the 2024 fishing season.

When will the Emergency Rule go into effect?

This Emergency Rule will be in effect from Jan. 1, 2024, through June 29, 2024, or until it is superseded by a final rule implementing the Framework Action.

The Emergency Rule will not be extended.

Where can I find more information on the Emergency Rule?

Contact NOAA Fisheries, Southeast Regional Office.
By Mail:

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NOAA Fisheries, Southeast Regional Office
Sustainable Fisheries Division
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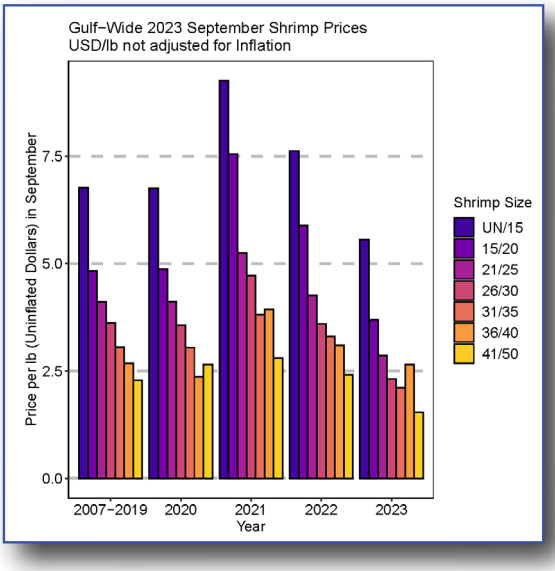
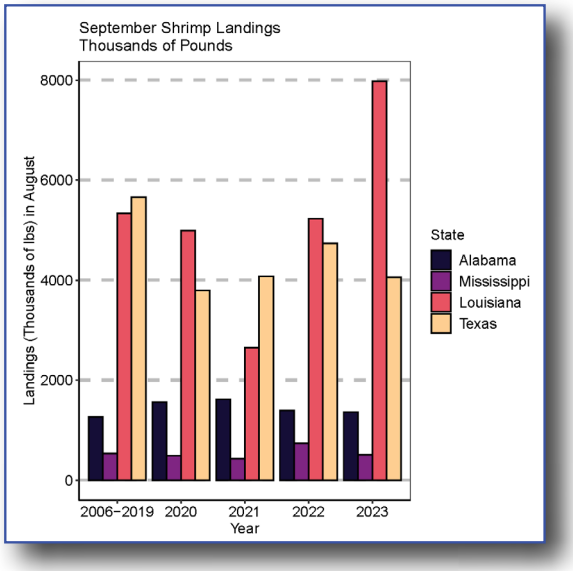
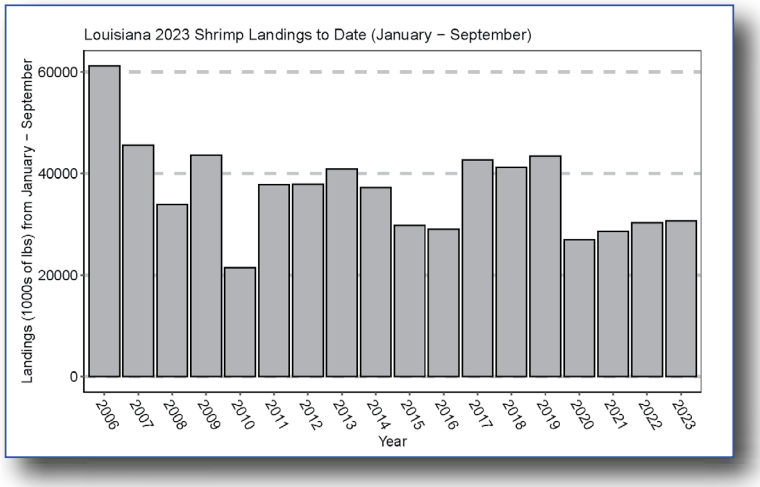
St. Petersburg, Florida 33701-5505
By FAX: (727) 824-5308
By Phone: (727) 824-5305

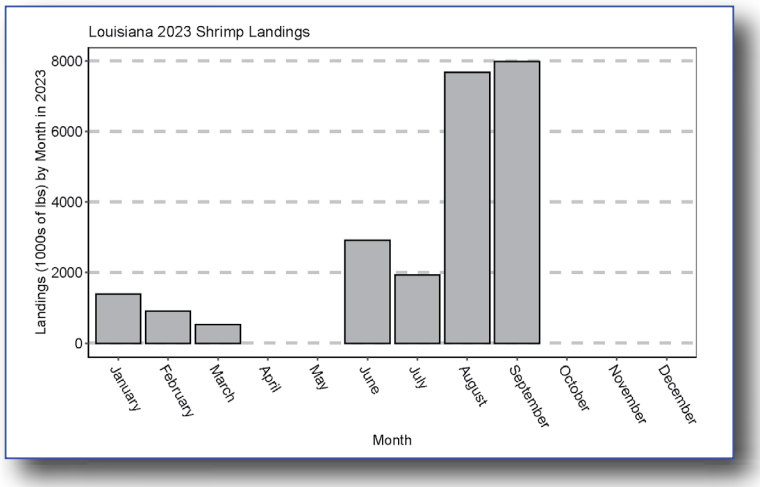
Louisiana Shrimp Watch

The shrimp watch data for the January issue includes data through September. All landing data is based on trip ticket data provided by Gulf States and no estimations have been made.









THE GUMBO POT

Loaded Blue Crab Frittata*

Recipe courtesy of Ms. Sarah's Country Kitchen.
From Ms. Sarah: Happy New Year Lagniappe readers!
If your house is anything like mine, you will want to take a break from cooking.
This recipe is so easy and so delicious, anyone can make it (even those not so inclined to be in the kitchen…!)
Please reach out to the editor on suggestions for recipes or ingredients to use in future editions.
We are always looking for feedback and improvement!

Ingredients:

- 8 oz Louisiana lump Blue Crab
- 8 eggs – large
- 1 red bell pepper
- 1/3 onion
- 2 cups packed baby spinach
- ½ tbsp Cajun seasoning
- Cooking spray

Directions:

1. Preheat oven to 375 degrees.
2. Dice the bell pepper and onion.
3. In a large bowl, crack eggs and add bell pepper and onions, stir to mix. Add spinach and seasoning, mix to combine.
4. Drain the lump crab meat and add to egg mixture, making sure to break up the meat while mixing.
5. Spray a glass 10" pie pan generously with cooking spray. Dump the egg mixture into the pie pan and smooth with a spatula.
6. Bake for 40 minutes or until an inserted thermometer reads 160 degrees.
7. Enjoy!

**Total time: 50 minutes. Makes 6-8 slices.*

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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 Jeffrey Plumlee at *jplumlee@agcenter.lsu.edu*

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Be sure to visit the *Lagniappe* blog for additional news and timely events between issues.
https://louisianalagniappe.wordpress.com/

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