

# Alligator Gender Determined by Climate

In Louisiana, alligators have been an important part of the landscape going back to pre-historic times.

They've been harvested in Louisiana for more than 200 years for their hides which are used to make boots, belts, and were even used to make saddles for Confederate soldiers during the Civil War. However, it wasn't until commercial tanning processes were used that the hides were in high demand because this processing make the hides softer and more durable and pliable.

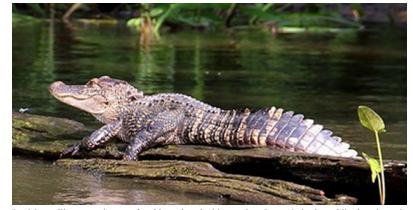
Because of this increased demand around the turn of the 20th century, hunting of alligators increased and by the late 1950s, the population dropped to dangerously low numbers. As a result, in 1962, alligator hunting in Louisiana was closed in an effort to help increase the population, while state officials tried to find some sound management practices for the species. While under protection, alligator populations thrived and between 1972 and 1981, the Louisiana Department of Wildlife and Fisheries (LDWF) gradually introduced a regulated wild alligator harvest.

Today, there are 2,000 licensed alligator hunters who take between 30,000 to 35,000 alligators annually. In the wild, there are estimates that Louisiana has about 1.5 million to two million gators, while another 300,000 to 500,000 are being raised on alligator farms around the state. Some sources say that Louisiana has more alligators than any other state, including Florida. In 1983, the

alligator was adopted as Louisiana's state reptile.

So, what do alligators have to do with weather? Well, the gender of alligators happens to be determined by temperature during the incubation of the gator eggs. The sensitive period of incubation is between seven to 21 days, whereas when the temperature is less than or equal to 86 degrees, the gender is female, while an incubation temperature greater than or equal to 93 degrees produces male gators. At temperatures in between... well, I guess you get a mix.

Nests for the eggs are built out of vegetation, sticks, leaves and mud, while the decomposition of the vegetation Louisiana alligator resting comfortably and sunbathing on log. Image is in the public domain an is generates heat for the eggs. Levee nests are generally



available at http://pixabay.com/en/alligator-swamp-bayou-animal-169121/.

warmer and produce males, while nests in the wet marsh are generally cooler and tend to produce females. Turtle eggs tend to work in the opposite direction, whereas warmer incubation periods produce females and cooler eggs lead to males.

In the bigger picture, there is some speculation that some animals may have gone extinct because climate change led to one gender of some species being selected out of existence due to the climate. It is amazing how important weather and climate can be, even when it comes to frisky alligators. Please contact me with any questions at keim@lsu.edu.

- Barry Keim, Louisiana State Climatologist, LSU, Southern Climate Impacts Planning Program.

The following websites were useful in compiling this story:

http://en.wikipedia.org/wiki/American alligator www.wlf.louisiana.gov/alligator-hunting-regulations-overview www.nature.com/nature/journal/v296/n5860/abs/296850a0.html





# 2019 Recreational Red Snapper Season & State Management

The 2019 recreational red snapper season will begin on Friday, May 24 in both state and federal waters. The season will run weekends only (Friday, Saturday and Sunday, including the Monday of Memorial Day and the Thursday of Independence Day) with a daily bag limit of two fish per person and a 16-inch total length minimum size limit.

The season will remain open until recreational landings approach or reach Louisiana's annual private recreational allocation of 19.1 percent or 816,439 pounds of red snapper, according to estimates from LA Creel, a 73,439 pound (9.8 percent) increase from last year.

Louisiana is operating under its second year of an Exempted Fishing Permit, which allows the department to manage the private recreational red snapper season in state and federal waters. Under the EFP, participating anglers will be allowed to fish red snapper in state territorial seas and the adjoining federal EEZ, from shore to 200 nautical miles, during the season set by the Louisiana Wildlife and Fisheries Commission. NOAA Fisheries will continue to regulate federal for-hire charter vessels.

The Gulf of Mexico Fishery Management Council (GMFMC) voted unanimously to give Louisiana total control of private recreational red snapper fishing, meaning recreational anglers will have increased opportunities to harvest red snapper, a species once nearly depleted in the Gulf.

State management will begin with the 2020 private recreational red snapper season. Anglers should see fishing seasons similar to what they experienced in 2018 and 2019.

The LWF Commission will establish rules for the state's red snapper fishery. The department will manage the resource effectively and have the ability to close the season quickly, when needed, to prevent overfishing.

The Commission now has the authority to set seasons, bag and size limits, and other management regulations for private recreational red snapper fishing in federal waters (out to 200 nautical miles).

# **Modifications to the Shrimp Effort Threshold & Historical Capt. Permits**

The GMFMC took final action on Shrimp Amendment 18, and selected to reduce the allowable shrimp effort to 60 percent below the baseline years and revise the framework procedure to allow future effort reduction goals through the standard open framework documentation process.

Analysis shows that the effort reduction threshold, which currently requires that shrimp effort in the area monitored for juvenile red snapper be 67 percent below the effort in the baseline years of 2001-2003, can be reduced to 60 percent without affecting the rebuilding of the red snapper stock.

These suggested shrimp management changes will be transmitted to the secretary of commerce for approval and implementation.

The GMFMC also took final action to allow people with historical captain permits the option to replace them with standard for-hire permits for federally managed reef fish and/or coastal migratory pelagic species. Each newly issued for-hire permit will have the same permit capacity as the historical captain permit it would replace. Only valid historical captain permits as of Oct. 25, 2018 (last day of the October council meeting) would be eligible for replacement with standard permits. Outstanding letters of eligibility will be invalid as of the implementation date of this action.

There are 32 historical captains eligible to replace their permits with standard for-hire permits. In contrast to standard for-hire permits, historical captain permits are not transferable and require the captain to be onboard the vessel when operating as a charter.

These suggested management changes will be transmitted to the secretary of commerce for approval and implementation.

# Early Draft of Study Shows Speckled Trout Numbers Down; New Evaluation Underway

LDWF is reassessing the state's stock of speckled trout. An earlier preliminary, but incomplete draft indicated that the stock was overfished and landings had decreased to their lowest levels in recent years.

LDWF says those preliminary findings are going through a re-evaluation and finalization process that will take several months. The department also says while the numbers have actually decreased, they do not necessitate a need to make immediate changes in the number of speckled trout anglers can take.

LDWF will bring the finalized stock assessment that will include potential management options to improve the status of the stock at a future commission meeting. The analysis will include several possible recommendations, including, but not limited to, bag and size limit modifications. The public will also have ample opportunity to comment during commission meetings and public hearings prior to any management changes being finalized by the commission.

### **Queen Bess Island Restoration**

Funding has been approved to restore Queen Bess Island, a major breeding ground for the state bird the brown pelican. Approved funding for the project that will restore 30 acres of brown pelican and wading bird habitat and seven acres of nesting tern habitat to the 37-acre island near Grand Isle in Jefferson Parish.

The funding comes from the Deepwater Horizon oil spill Natural Resource Damages (NRD) settlement. The project will begin in early fall 2019 and should be completed by the middle of February 2020.

Queen Bess is the third largest brown pelican rookery in Louisiana, producing 15-20 percent of the state's nesting activity. It is also nesting habitat for about 10 species of nesting colonial water birds, such as tri-colored herons, great egrets and royal terns. The island, which is battling land loss from subsidence and erosion from over wash, currently has about only five acres of nesting habitat available.



# **Important Dates & Upcoming Events**

**April 23-25, 2019:** LDWF Bourg Office;, 467 Texas Gulf Road, Bourg, LA, 8 a.m. to 3:30 p.m. New and renewals of commercial fishing licenses and motorboat registration.

**April 30-May 2, 2019:** LDWF New Orleans Office, 2045 Lakeshore Drive Suite 438, New Orleans, LA, 8 a.m. to 3:30 p.m. New and renewals of commercial fishing licenses and motorboat registration.

May 11, 2019: Recreational harvest of gray triggerfish will close in state and federal waters of Gulf of Mexico, will reopen March 1, 2020.

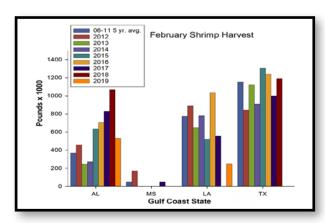
May 13-14, 2019: LDWF Lake Charles Office, 1213 North Lakeshore Drive, Lake Charles, LA 9 a.m. to 3:30 p.m., New and renewals of commercial fishing licenses and motorboat registration

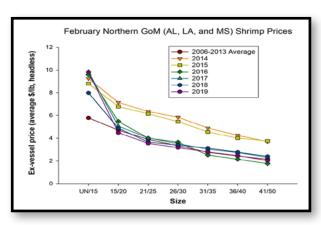
May 15-16, 2019: LDWF Lafayette Office, 200 Dulles Drive, Lafayette, LA 70506, 9 a.m. to 3:30 p.m. New and renewals of commercial fishing licenses and motorboat registration

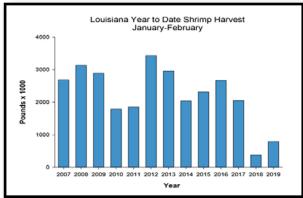
August 1, 2019: Recreational harvest of greater amberjack in state and federal waters of the Gulf of Mexico will reopen.

# **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: <a href="https://www.st.nmfs.noaa.gov/st1/market\_news/index.html">www.st.nmfs.noaa.gov/st1/market\_news/index.html</a>.







# THE GUMBO POT

### CHEF PAUL'S BRONZED FISH

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:**

2 tbsp. unsalted butter, melted and slightly cooled6 4- to 5-ounce fresh Louisiana fish fillets,at room temperature

1 tbsp. seasoning like Chef Paul Prudhomme's Blackened Redfish Magic, Seafood Magic or Meat Magic

### **Method:**

Heat a 10-inch skillet, preferably nonstick, over high heat to 350°F, about 4 minutes.

Be sure the fish is at room temperature, so that the butter will adhere but not congeal. Brush one side of each fillet with the melted butter and evenly sprinkle ½ teaspoon seasoning on the buttered side of each fillet. Carefully place the fillets, two at a time, buttered and seasoned sides down, in the skillet. Brush the top side of each fillet with butter and evenly sprinkle each side with ½ teaspoon seasoning. Reduce the heat to medium and cook, turning several times, to the desired doneness. To test for doneness, at the thickest part of the fish, try to flake it with a fork. If it does flake, it's done, so remove it immediately. If it doesn't flake cook just a little longer and test again. Be careful not to overcook or the fish will be too dry.

Serves 6

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

# **Lagniappe Fisheries Newsletter**

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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.

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