

## Commercial Florida Stone Crab Fishing in the Gulf of Mexico States

Florida stone crabs (*Menippe mercenaria*, Say, 1818, Fig. 1) inhabit U.S. waters from North Carolina south to Florida. They live in burrows from the shoreline to 200 feet water depth. They are harvested for their claws primarily with baited traps. The fishery takes place mainly in Florida state waters. Thus, the Florida Fish and Wildlife Conservation Commission manages the fishery.



Figure 1. Extension associate Amanda Jefferson holding a live Florida stone crab.

The season runs from October 15 through May 15 (Fig. 2). By Florida law, the larger, immovable part of the claw must measure at least  $2\frac{3}{4}$  inches for harvest. It takes about 3 to 4 years for crabs to reach this size. It is illegal to harvest claws from females that are carrying eggs. Depending on their size, female crabs can produce thousands to millions of eggs in a single spawning season (in Florida waters, April – September). Female stone crabs have a wide, round abdomen, while males have a long, narrow abdomen.

Stone crabs regenerate lost claws by molting. It takes approximately three molts (three years) for an adult to regenerate a claw to about 95% of the original claw's size. However, stone crabs can only regenerate a lost claw if the joint between the body and the claw is intact. To forage effectively, crabs missing both claws change their feeding strategy from predator to scavenger. Davis et

al. (1978) reported that nearly half of crabs with both claws removed died. Stone crabs are estimated to live 7 to 9 years, but crabs in fished populations probably have a shorter lifespan.

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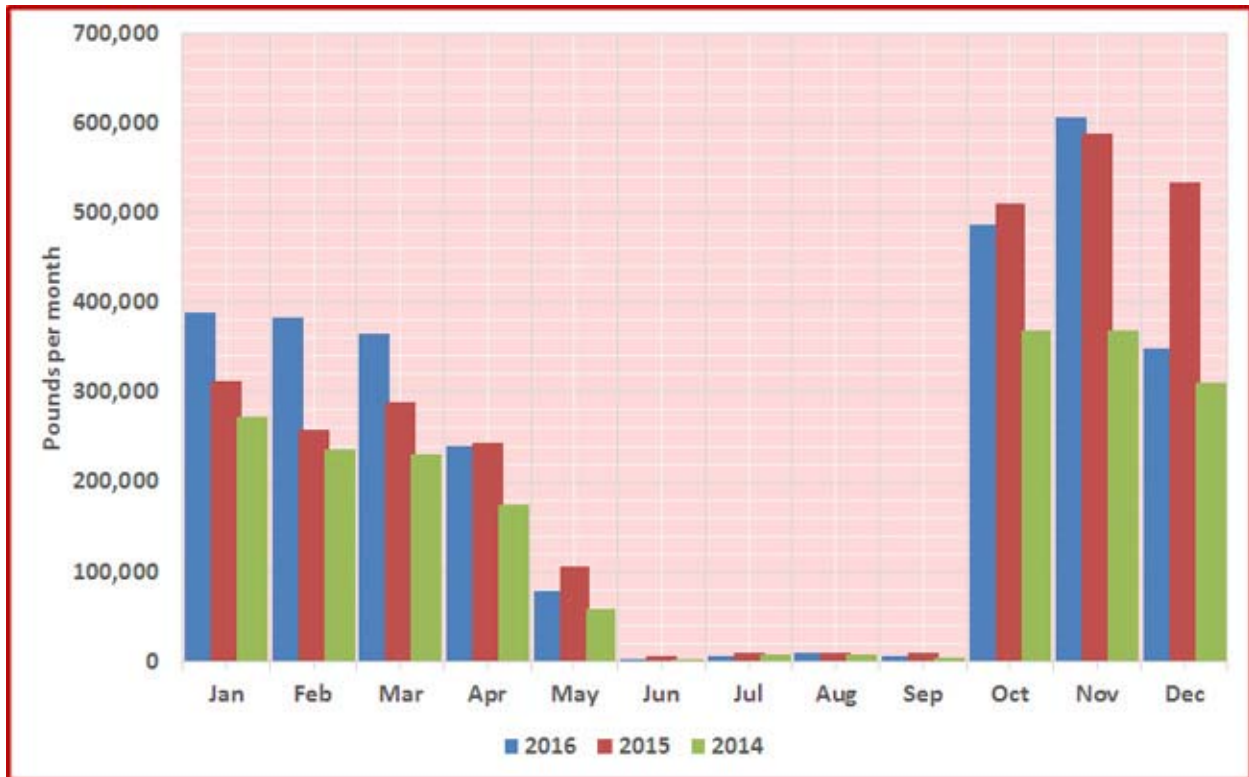


Figure 2. Monthly commercial Florida stone crab claw landings in the Gulf of Mexico states. Source of raw data: NOAA Fisheries. Last visited: June 26, 2018. <http://www.st.nmfs.noaa.gov/>.

## Recipe for Stone Crab with Mustard Sauce



Figure 3. This recipe is courtesy of <https://www.epicurious.com/>. For ingredients and cooking instructions, please visit <https://www.epicurious.com/recipes/food/views/stone-crab-with-mustard-sauce-51126840>.

### Commercial Landings

The long-term annual commercial Florida stone crab claw landings in the Gulf of Mexico states are shown in Fig. 4. Since 2011, the Florida West Coast supplied 96.3% of the entire Florida stone crab claw domestic landings averaging 3.7 million pounds and valued at \$27.8 million annually. The Florida East Coast provided most of the remaining balance of the total domestic landings.

### MarketMaker Businesses

In 2016, the Gulf-wide commercial landings of Florida stone crab claw reached 3.0 million pounds with dockside values of \$29.9 million. Florida stone crab claws are harvested from October 15 to May 15 (Fig. 2). More than 160 businesses which harvest, process, and sell crabs are registered in MarketMaker nationwide.

To search for crab businesses, perform the following procedures:

1. Go to <http://ms.foodmarketmaker.com>
2. Click “search” and type “Crab” in the search box.
3. You can sort the search results by relevance and name.

4. You can also limit online searches by state, county, city or number of miles from a specified location, and type of business.



Figure 4. Annual commercial Florida stone crab claw landings in the Gulf of Mexico states. Source of raw data: NOAA Fisheries. Last visited: June 26, 2018. <http://www.st.nmfs.noaa.gov/>.

### Economic Contributions

The economic contribution the stone crab industry makes locally, region-wide, or nation-wide is crucial information in making private investment decisions, formulating government policy, and developing research and extension programs for the industry. The IMPLAN (<http://implan.com/>) software and the 2013 input-output data for the five Gulf States were used to estimate the economic contribution of commercial fishing to the Gulf of Mexico regional economy in 2016. The economic analysis used sector 17 or commercial fishing of the 2013 IMPLAN input-output data.

The annual commercial dockside values of Florida stone crab claw in the Gulf of Mexico states in 2016 reached \$29.9 million, which was 9.3% more than the average yearly dockside values in the region since 2011. The total output contribution of commercial Florida stone crab claw fishing in 2016 amounted to \$57.1 million (Fig. 5). The Florida stone crab claw commercial fishing sustained 813 jobs and generated labor income amounting to \$20.5 million in the Gulf regional economy.

The Florida stone crab claw commercial fishing industry generates annual tax revenues for the Gulf States and the U.S. federal government. About \$3.5 million was estimated to have been paid by households and businesses in 2016 to the federal government as social insurance tax, tax on production and imports, corporate profit tax, and

personal income tax. The Gulf States were expected to have collected taxes from households and businesses in 2016 amounting to \$1.7 million as social insurance tax, tax on production and imports, corporate profits tax, and personal tax.

<b>Economic contribution of commercial Florida stone crab claw fishing in the Gulf of Mexico States</b>				
Impact Type	Employment (Jobs)	Labor Income (\$M)	Total Value Added (\$M)	Output (\$M)
Direct Effect	666	12.6	15.5	29.9
Indirect Effect	48	3.2	6.2	13.2
Induced Effect	99	4.7	8.5	14.0
<b>Total Effect</b>	<b>813</b>	<b>20.5</b>	<b>30.2</b>	<b>57.1</b>

Figure 5. The total economic contribution includes direct, indirect and induced effects estimated by using 2016 annual landing values and 2013 IMPLAN data. The local purchases percentage was set at 100%. The number of jobs is rounded off.

### **Promote your Products in Season**

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### **Suggested citation:**

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