

## Overview: Florida's Stone Crab Fishery



Stone crabs are one of the most economically valuable commercial fisheries in Florida. According to the Florida Fish and Wildlife Commission over 2.7 million pounds of stone crab claws were landed in the state with an estimated dockside value of over \$25 million in 2012. Ironically, stone crabs were once considered a by-catch species in the spiny lobster fishery with little value, but eventually markets were developed in the 1950s and 1960's and a stand-alone fishery was developed.

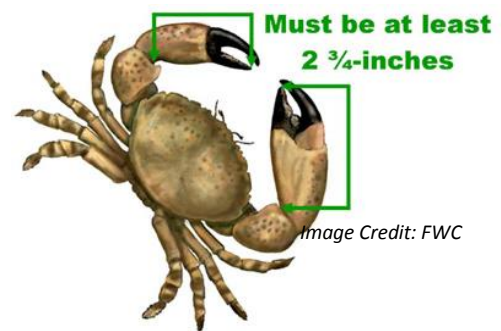
Two species of stone crabs are harvested in Florida's waters, the Florida Stone Crab (*Menippe mercenaria*), and the Gulf Stone Crab (*Mennippe adina*). Gulf stone crabs are mostly found in the Northern Gulf of Mexico from Texas to parts of the Panhandle. Florida stone crabs are found from the west central part of Florida south to the Florida Keys and around the peninsula to east central Florida as well as parts of South and North Carolina. In between this area on the east coast along with parts of the Panhandle a hybrid zone occurs where both species of stone crab occur and interbreed.

### Management

The stone crab fishery is unique in that only the claws are taken, and the crabs must be returned to the water alive. In addition, the fishery is managed by:

- A seven month open season-October 15<sup>th</sup> -May 15<sup>th</sup>
- 2 3/4-inches minimum claw size requirement  
(Both claws can be removed if legal size)
- Trap specifications
- Trap limitation program
- Female crabs with eggs are prohibited from being harvested

Because the stone crab fishery is mostly centered in Florida, federal fisheries managers granted the Florida Fish and Wildlife Conservation Commission management authority for the fishery.



The fact that only the claws are taken and the crab is not killed helps ensure the long-term sustainability of the fishery. Estimates for stone crab population distribution, abundance, and recruitment patterns, have remained steady for the past 20 to 30 years. Fishing pressure, however, remains high and this has been reflected by general decreasing trend in catch-per-trap over time. For example between the 1962-63 and 2001-02 seasons the number of traps used in the fishery increased 100 fold from 15,000 traps to 1.6 million traps according to state officials. In 2002 the state legislature implemented a trap limitation program to reduce the number of traps entering the fishery, but managers expect it will be several decades before they reach their management goals of 600,000 traps.

Managers believe the stone crab fishery remains resilient for several reasons including:

- Most female stone crabs spawn one or more times before their claws reach legal size
- Some crabs survive the declawing process (*approximately 13% of claws observed by FWC samplers are estimated to be regenerated*)
- The fishing season is closed during the crabs' principal spawning season
- The fishery is responsibly managed with the active engagement of the stone crab industry

## Stone Crab Landings

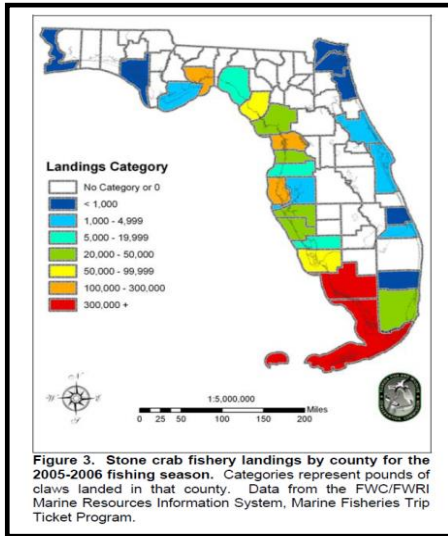


Figure 3. Stone crab fishery landings by county for the 2005-2006 fishing season. Categories represent pounds of claws landed in that county. Data from the FWC/FWRI Marine Resources Information System, Marine Fisheries Trip Ticket Program.

Florida's Gulf coast accounts for approximately 98% of the total Florida stone crab landings in the state. Highest landings occur in Monroe and Collier counties, which typically account for more than 50% of the total statewide landings. For example, of the 2.7 million pounds of claws landed in the 2012/2013 season Monroe and Collier Counties landed approximately 1.5 million pounds or 56% of the total. Other counties with relatively high landings include Citrus, Pinellas, and Wakulla Counties, which together account for approximately 25% of the statewide landings.

To view a complete listing of commercial landings statewide, by coast, and by county in Florida visit:

[http://research.myfwc.com/features/view\\_article.asp?id=19224](http://research.myfwc.com/features/view_article.asp?id=19224)

## Gear

Stone crabs are harvested primarily using baited traps. Commonly used bait included pig's feet, mullet, and/or fish carcasses. Traps are typically constructed of wood or plastic, but wire traps are also

allowed. Plastic traps are required to have a degradable wood panel to minimize by-catch if the trap is lost or abandoned. Traps are deployed in long lines of up to 100 traps where each individual trap is buoyed. A single operation may have thousands of traps in the water at a time though. Trap buoys (and vessels) are marked with the letter "X" and a permit number specific to each harvester and every trap must have a valid permit tag attached to it. Fishermen may only work their traps during daylight hours and traps are retrieved approximately every 10 to 12 days using a mechanical winch.



It is important to note that it is a third degree felony for tampering with someone else's traps (or their content), lines, or buoys. In addition to criminal penalties, violators can be fined \$5,000 and lose their saltwater fishing privileges.

## Processing/Marketing

Once back at the dock, stone crab claws are cooked. Claws are sold fresh-cooked or frozen, and are sold in several size grades based on weight: medium (*up to 3 ounces*), large (*between 3 and 5 ounces*), and jumbo (*5 ounces and higher*). It generally takes about a pound of crab claws to feed one person. Prices can vary between

\$10 and \$40 a pound depending on the size of claws, supply, and demand. To learn more about buying stone crab claws and other Florida seafood visit: <http://www.freshfromflorida.com/Divisions-Offices/Marketing-and-Development/Consumer-Resources/Buy-Fresh-From-Florida/Seafood-Products>



Of special note are claws called "floaters" or "lights." These are claws that come from crabs that have molted recently and therefore are not completely filled with meat. When cooked they float to the top, hence the name. They are easy to spot before cooking; they are much lighter and sometimes the shell is a lot thinner. Sometime in fish houses you will see them for sale at a greatly reduced price since they do not contain nearly as much meat. They are not sold to restaurants or sold retail without being clearly identified.

### **Recreational Harvest of Stone Crabs**

Recreational harvest of stone crabs is permitted in Florida, but just as in the commercial fishery, there are several regulations associated with it. The recreational fishery has the same open season and minimum claw size requirements, but in addition:

- There is a 5-trap maximum\*
- There is a daily bag limit of one gallon of claws per person or two gallons per vessel.
- Traps must be retrieved manually and only during daylight hours.
- A Florida recreational fishing license is required.
- Free standing traps (*not attached to a dock*) must have an "R" permanently affixed on the buoy to denote it's a recreational trap.
- The harvester's name and address must also be permanently affixed to the trap.
- Traps must not be placed in navigational channels of the Intracoastal waterways, or in navigational channels maintained and marked by any county, municipal, state or federal governmental agency.



\* Stone crab trap specifications are the same for recreational and commercial harvesters. Trap specifications may be found in Rule 68B-13.008, Florida Administrative Code.

To view the regulations associated with the recreational harvest of stone crabs in Florida visit: [http://www.myfwc.com/RULESANDREGS/Saltwater\\_Regulations\\_recstonecrab.htm](http://www.myfwc.com/RULESANDREGS/Saltwater_Regulations_recstonecrab.htm)

### **Additional Resources**

- **Gulf FINFO information on Stone Crab:** <http://gulffishinfo.org/Species?SpeciesID=179>
- **FWC Stone Crab Research:** <http://myfwc.com/research/saltwater/crustaceans/stone-crabs/catch-data/>
- **Florida Stone Crab Recipes:** [http://www.fl-seafood.com/recipes/stonecrab\\_recipes.htm](http://www.fl-seafood.com/recipes/stonecrab_recipes.htm)

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