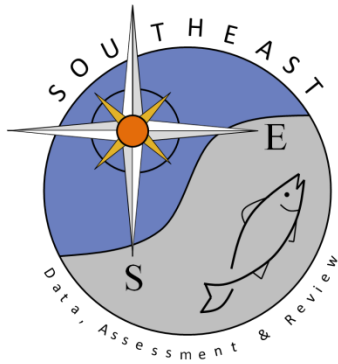


Status and Trends Report: 2012 Rock Shrimp Species Account

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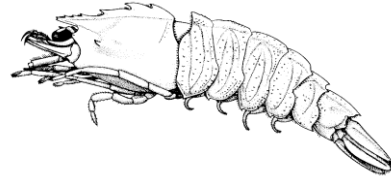
Status and Trends Report: 2012 Rock Shrimp Species Account

Florida Fish and Wildlife Conservation Commission
Fish and Wildlife Research Institute
100 Eighth Avenue Southeast
St. Petersburg, Florida 33701-5020

In-House Report IHR2012-058

Rock shrimp, Family Sicyoniidae

Brown rock shrimp, *Sicyonia brevirostris* (Stimpson, 1871)



Rock shrimp occur from about Norfolk, Virginia south throughout the Gulf of Mexico to Cabo Catoche, Yucatan. They are typically found in water 33'–240' deep, but exploitable populations occur between 112' and 180'. The planktonic stage (from spawning until the first postlarval stage) lasts for about 30 days (Cook and Murphy 1965). Animals in this stage can be retained within coastal gyres (Criales and Lee 1995). Maximum life span was estimated to be 20–22 months. Females mature at lengths as small as 0.7 inches carapace length (CL); nearly all females reach maturity by 1.0 inch CL. Spawning occurs from November to January off east-central Florida, and females may spawn up to 3 times in one season (Kennedy *et al.* 1977).

In 2011, rock shrimp landings in Florida totaled 2,792,340 pounds. Gulf coast landings of rock shrimp accounted for 55% of statewide landings. Rock shrimp on the Atlantic coast were landed in Brevard, Duval, and Nassau Counties (Fig. 1). The highest landings on the gulf coast were made in Lee, Pinellas, Hillsborough, Pasco, Franklin, Gulf, and Bay Counties in 2011.

The 2011 statewide total landings of rock shrimp were 19% higher than the average landings in the previous five years (2006-2010) and were 45% lower than the 1982-2011 historical average landings (Fig. 2). On the Atlantic coast, landings from 1993 to 1995 averaged about 5.9 million pounds before spiking at 21.8 million pounds landed in 1996 (Fig. 2). On the gulf coast, landings have fluctuated widely without trend, ranging from around 200,000 to 4 million pounds during 1982-2011.

Standardized annual landings rates for rock shrimp follow a similar trend to those found in the landings. On the Atlantic coast, commercial catch rates increased dramatically in 1996 then declined and remained low from 1997 to 1999 (Fig. 2) after a portion of the fishing grounds was closed to protect the *Oculina* reefs. Atlantic coast landings rates have fluctuated since 1992 with the 2002, 2005, and 2007 rates among the lowest since 1992 (Fig. 3a). Gulf coast landings rates have been consistently low, with high peaks in 1992, 1998, 2004, and 2011 (Fig. 3b).

a. Commercial landings (pounds)

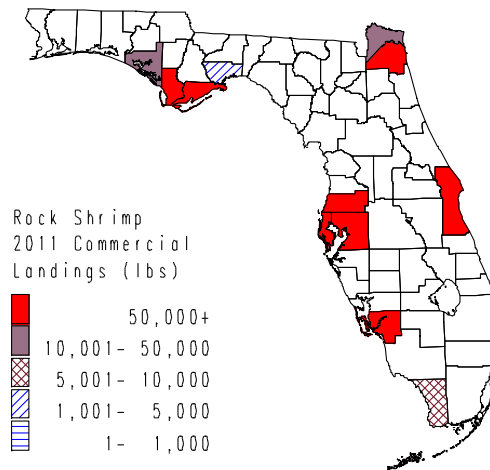


Figure 1 (a)-(c). Geographic distribution of rock shrimp landed commercially during 2011 by species and county.

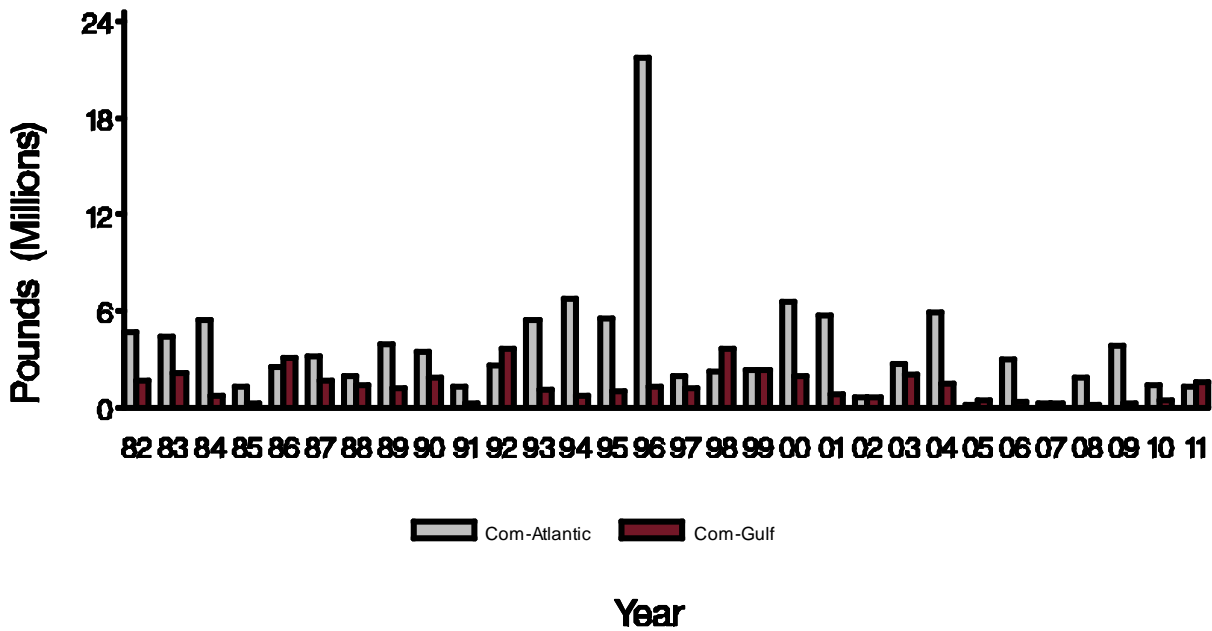
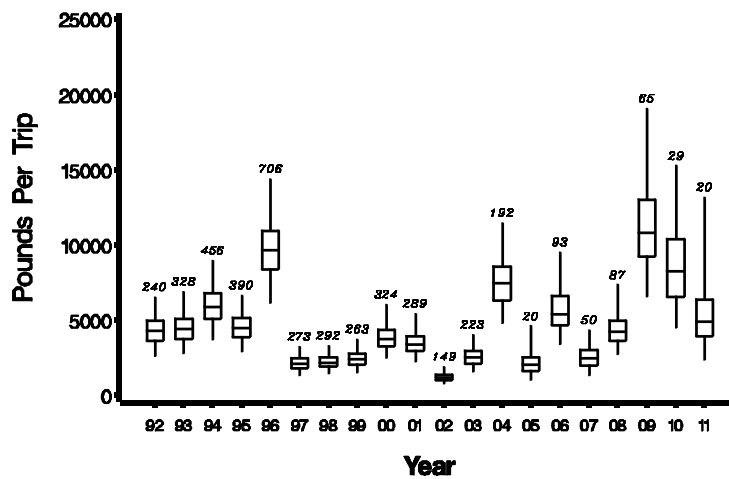


Figure 2. Total annual landings (pounds) of rock shrimp on the Atlantic and gulf coasts of Florida, 1982–2011.

a. Atlantic Coast, commercial landings rates (pounds/trip)



b. Gulf Coast, commercial landings rates (pounds/trip)

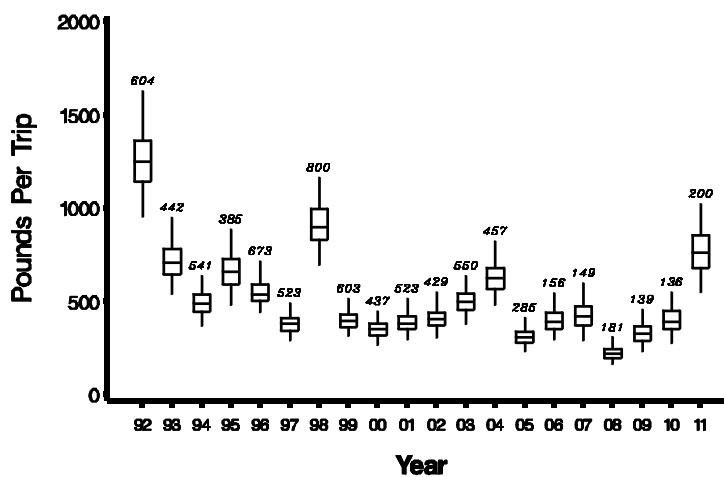


Figure 3 (a)-(f). Annual standardized catch rates for rock shrimp in Florida. Commercial landings rates (pounds/trip) 1992-2011: (a) Atlantic Coast; (b) Gulf Coast.