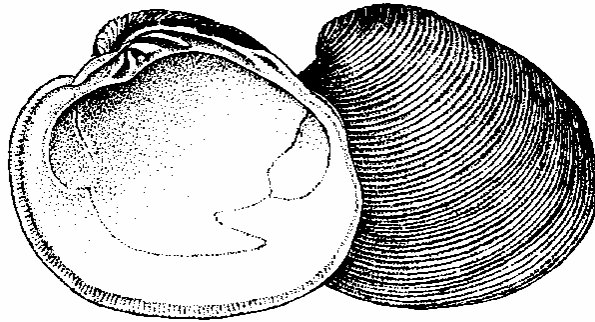


Hard clams. *Mercenaria mercenaria* and *M. campechiensis*



Two hard clam species occur in Florida waters. The northern hard clam, *Mercenaria mercenaria*, is the most common and the most commercially important. It ranges from the Gulf of St. Lawrence to the Gulf of Mexico. The southern hard clam, *M. campechiensis* occurs from New Jersey to the U.S. Gulf States and replaces the northern hard clam in certain areas along the Gulf coast of Florida. The two clams readily hybridize in areas where their ranges overlap. Hard clams can apparently live at least 22 years in Florida (Saloman and Taylor 1969). Hard clam growth is fastest during winter and spring, but in general, it is greater in deeper areas and in areas with submerged aquatic vegetation (Arnold *et al.* 1991). In Florida, southern hard clams appear to grow faster (1.2"/yr shell height) than northern hard clams (0.6"–0.8"/year; Arnold 1986). However, growth of hard clams in the Indian River depended on genotype and habitat, e.g., southern hard clams grew faster in deep-water unvegetated habitats (Arnold *et al.* 1996). Hard clams are protandric hermaphrodites; although, about 2% of the population develops directly into females during their first winter (Loosanoff 1937). Males can initially spawn when less than 0.6" shell length, whereas females initially spawn when greater than 1.2" shell length. In Florida, spawning occurs from December through April; a secondary spawn occurs in September.

Total annual landings of cultured and wild-caught hard clams in Florida during 2005 were 341,446 pounds (100% landed by the commercial fishery). About 57% of the landings were made on the gulf coast, mostly due to expanded culture activities. Wild hard clams are harvested from beds in the Indian River Lagoon and off the Big Bend area. Commercial landings were highest in Volusia county on the Atlantic coast and in Levy county on the gulf coast (Fig. 1). Landings trends for wild hard clams are cyclical and depend on occasional large sets of new recruits. Hard clams harvested from culture activities that have expanded since 1995 are included in the landings. In 2000, aquaculture operations produced 538,000 pounds of clams. On the Atlantic coast of Florida, wild and cultured clam landings peaked at 1.5 million pounds in 1985, dropped to 0.3 million pounds in 1990, then increased to about 1.8 million pounds in 1994 before declining to only 0.1 million pounds in 2001, and have remained stable at that level since (Fig. 2). Historically, gulf coast landings have been low, but landings have steadily increased from about 36,000 pounds in 1995 to nearly 756,000 pounds in 1999. From 1997-2003, gulf coast annual hard clam landings have averaged 0.54 millions pounds. Hard clam landings on the gulf coast have decreased dramatically to about 0.25 million pounds in 2004 and 2005. The increase in clam landings on the gulf coast through 1999 represents an aquaculture success story. After elimination of entangling nets in 1995, some fishers received training in culture methods, and

these efforts helped produced some of the landings observed. During 2004 and 2005 clam production has declined on the gulf coast, likely the result of increased competition and hurricane damage.

Commercial catch rates for wild-caught hard clams declined from 1992 through 1996 on the Atlantic coast and have remained below 20 pounds per trip since then (Fig. 3). On the gulf coast, catch rates show an increasing trend since 1996, with especially high catch rates in 2000 and 2005 (Fig. 4).

There is no assessment information for wild clam population in Florida.

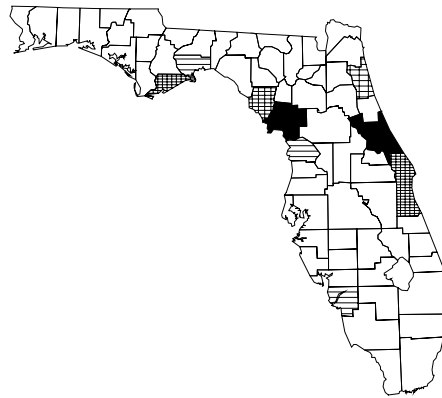


Figure 1. Geographic distribution of commercial landings of hard clam during 2005

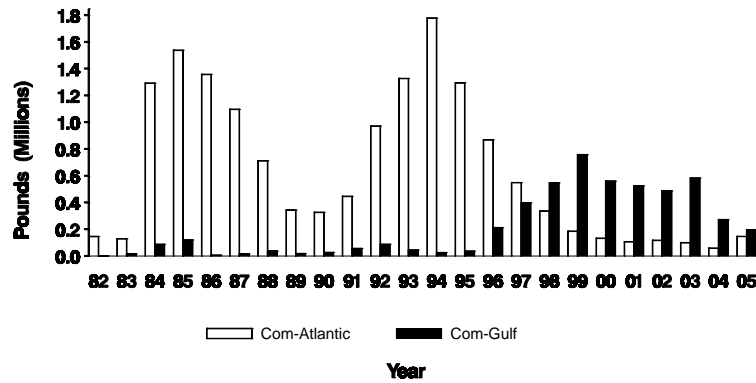


Figure 2. Total annual commercial landings on the Atlantic and gulf coasts of Florida, 1982–2005

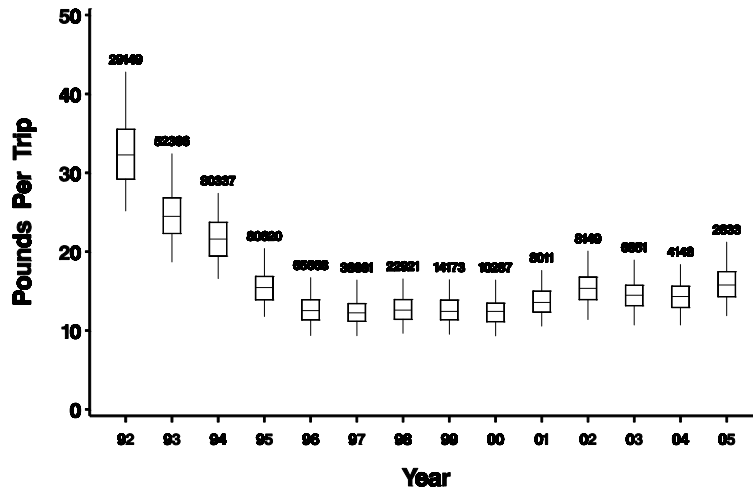


Figure 3. Standardized annual commercial catch rates (pounds) for hard clam on the Atlantic coast of Florida, 1992–2005; aquacultured clams excluded in this plot.

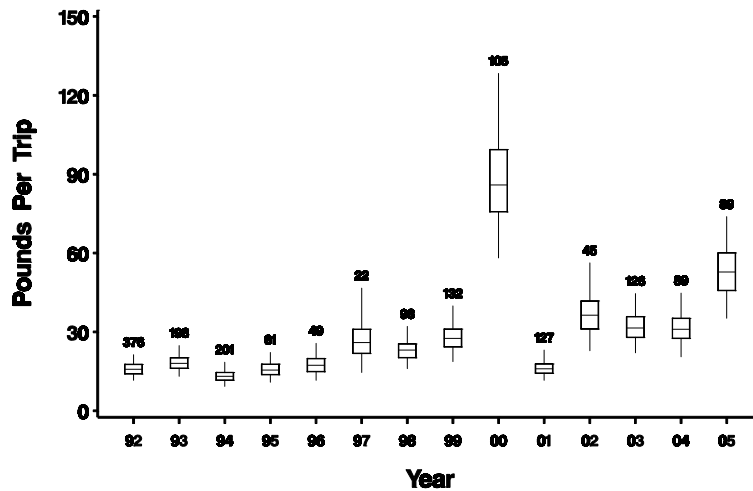


Figure 4. Standardized annual commercial catch rates (pounds) for hard clam on the gulf coast of Florida, 1992–2005; aquacultured clams excluded in this plot.