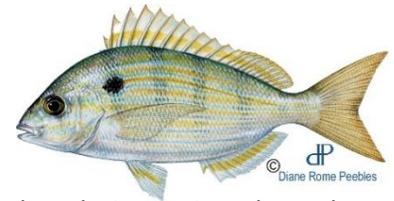
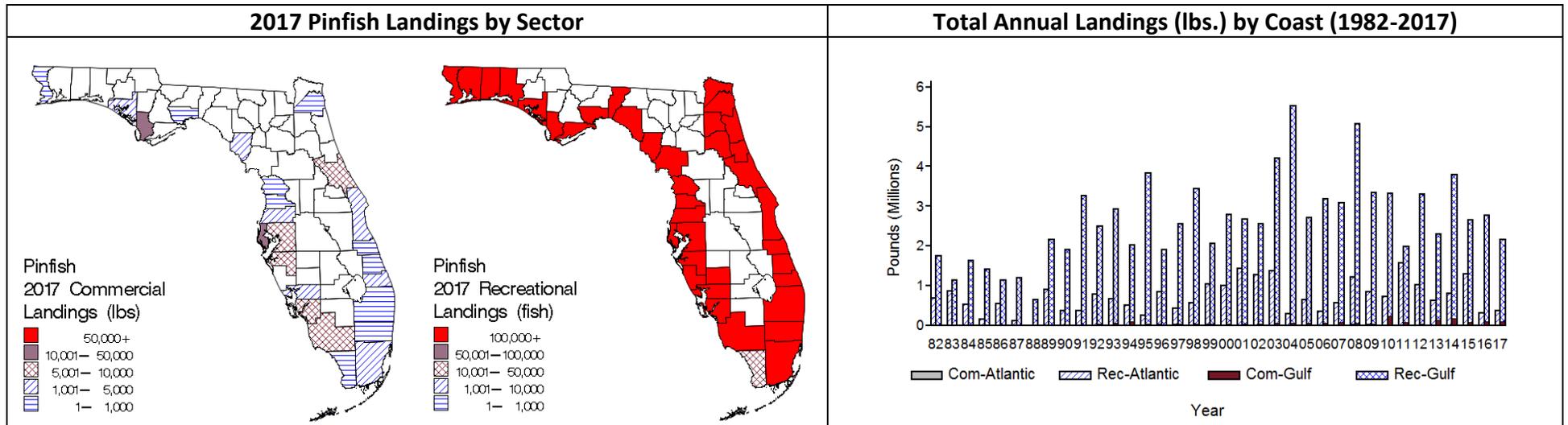


Pinfish, *Lagodon rhomboides* (Linnaeus, 1766)



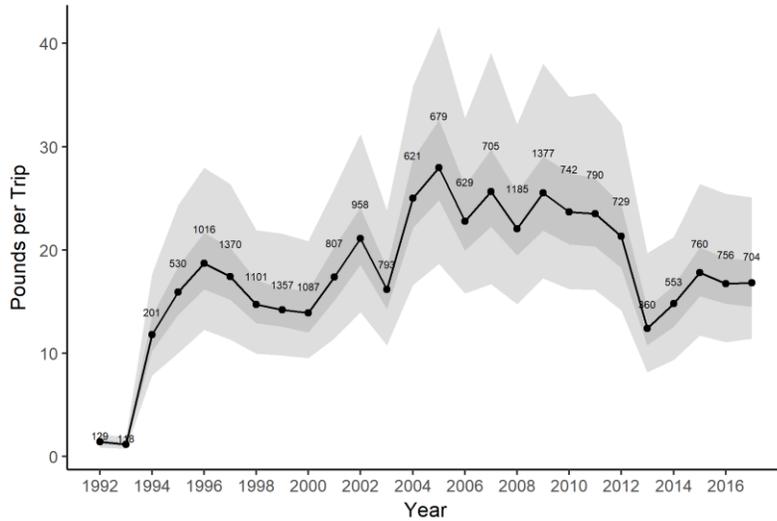
Life History

Pinfish are distributed throughout Florida's nearshore and estuarine waters. In some areas pinfish are so abundant that their grazing alters the composition of estuarine epifaunal seagrass communities (Stoner 1982). Pinfish move to offshore waters during the late fall and spawn there from late fall through early spring (Darcy 1985). Nelson (1998) found rapid instantaneous growth rates of 0.10–0.25 per month for young-of-the-year pinfish. Based on scale annulus formation, Hansen (1970) concluded that age-2 pinfish average 5 inches standard length (SL). Nelson (2002), using whole otoliths, found pinfish as old as 7 years. Pinfish mature at the end of their first or second years, when they are 4.3 inches SL or larger (Hansen 1970). Pinfish length at 50% maturity was estimated to be 5.2 inches SL. Instantaneous natural (M) mortality was estimated at 0.78 per year, and total instantaneous mortality (Z) was estimated at 0.90 per year (Nelson 2002). Pinfish are voracious predators as juveniles and subadults (Carr and Adams 1972; Stoner 1979). Adults are reported to be omnivorous (Stoner 1980). Juveniles feed primarily on shrimps, mysids, and amphipods. While the diet of adults includes most of that eaten by juveniles, adults also consume great deal of plant matter. Other reported food items include fish eggs, insect larvae, decapod crabs, bivalve molluscs, and polychaetes. As they get larger (less than about 1.6" SL) and incisor shape changes to flat-topped, pinfish switch from suction and ram feeding to biting (Luczkovich *et al.* 1995). Pinfish are an important forage item for many fish species (Darcy 1985). Known fish predators include alligator gar, longnose gar, ladyfish, spotted seatrout, red drum, bighead sea robin, southern and gulf flounders (Gunter 1945; Kemp 1949; Darnell 1958; Diener *et al* 1974; Rozas and Hackney 1984). Bottlenose dolphin also feed on pinfish (Kemp 1949).

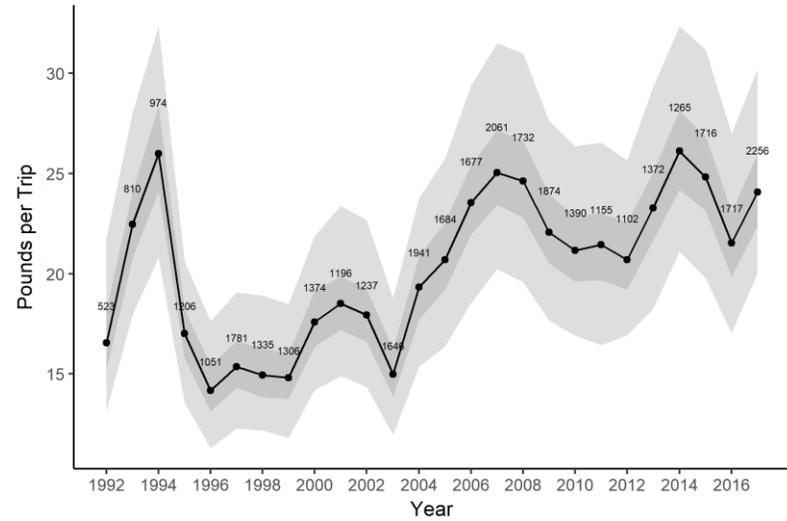


Fishers landed 2,529,121 pounds in 2017 which were 32.8% lower than the previous 5-year average (2012–2016). Coastwide, 85% of these were from the Gulf and 15% were from the Atlantic. Recreational landings constituted 96% of the total landings.

Atlantic Coast

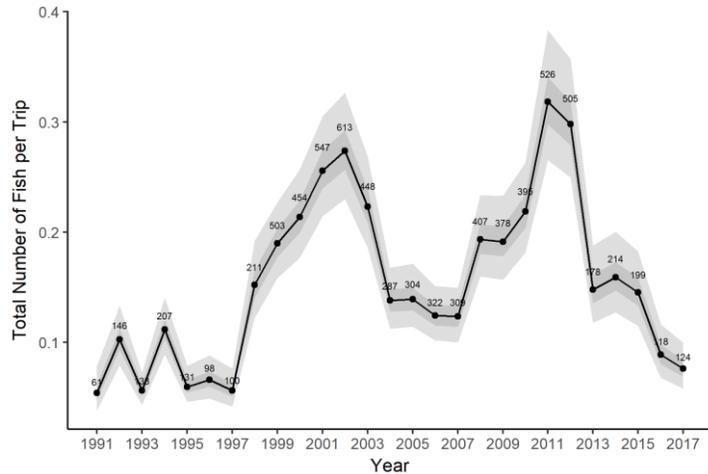


Gulf Coast

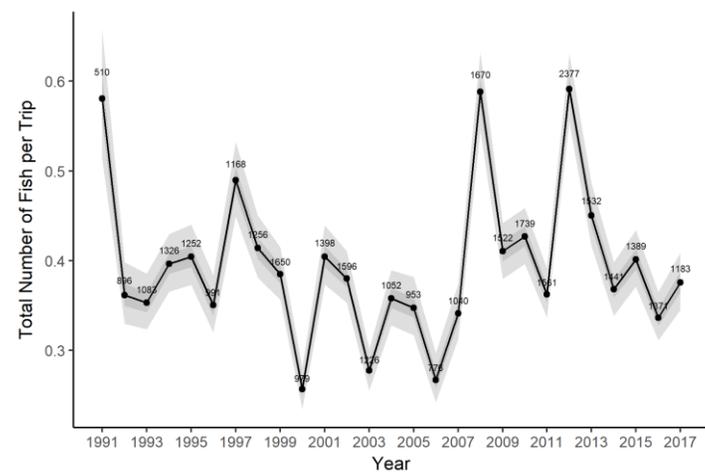


Standardized Commercial Catch Rates: Atlantic coast commercial catch rates varied in an upward trend through 2005 then decreased in 2013. Gulf coast commercial landings rates varied widely between 1992 – 2017 but catch rates have generally increased in recent years. Dark grey ribbons represent first and third quartiles while the light grey ribbons represent the 2.5% – 97.5% quantiles.

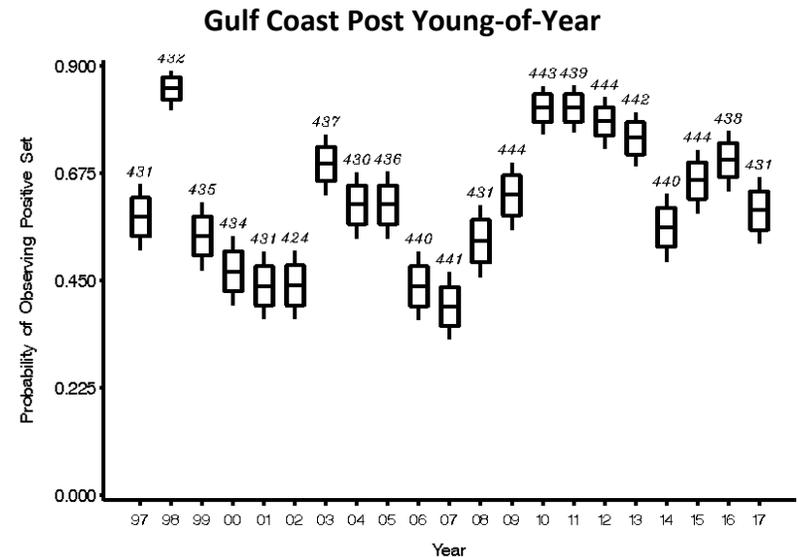
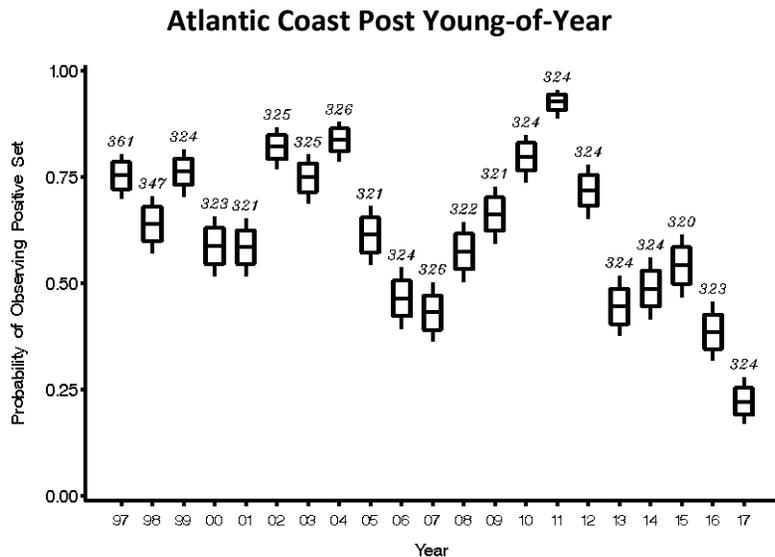
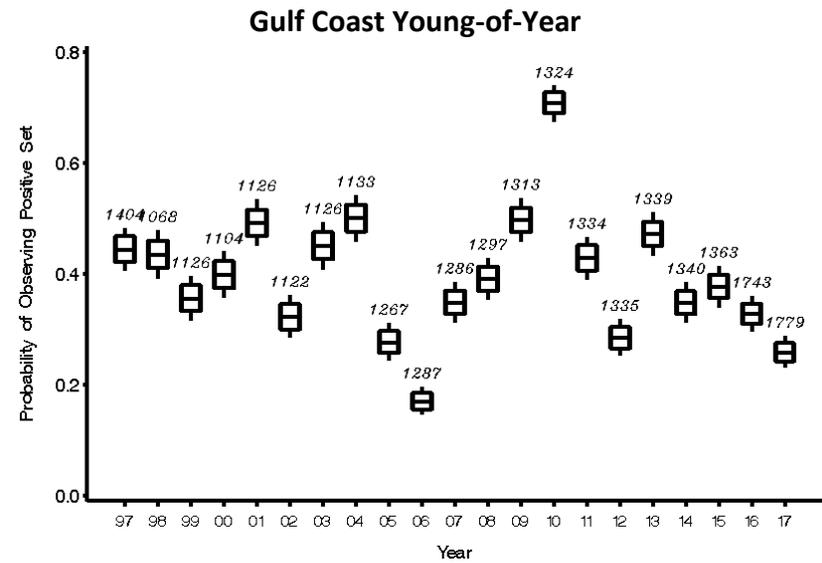
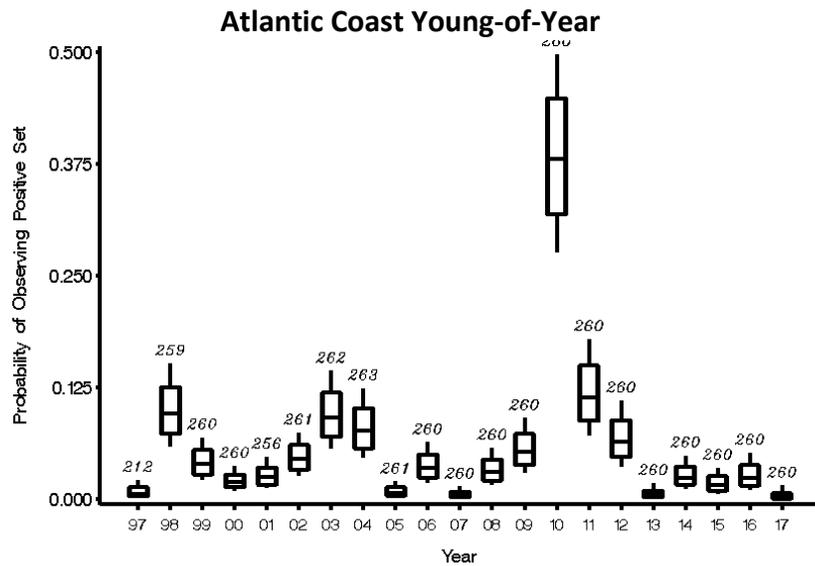
Atlantic Coast



Gulf Coast

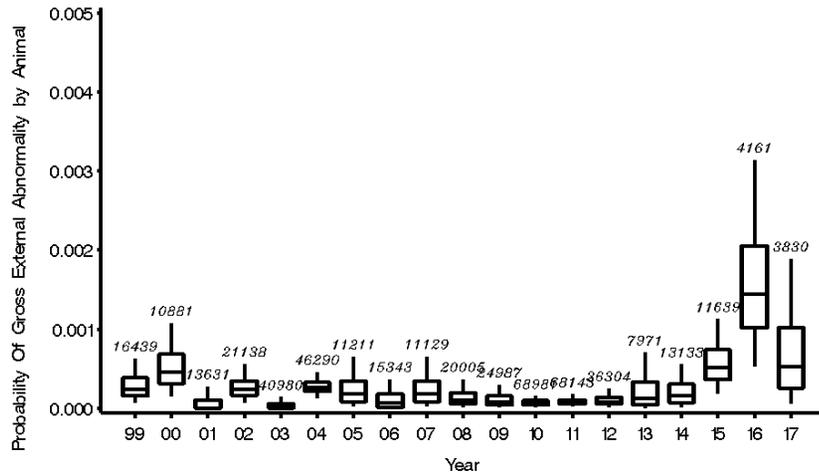


Standardized Recreational Total Catch Rates: Total catch rates for recreational anglers on the Atlantic coast have fluctuated markedly since 1997 but catch rates have declined in recent years. On the Gulf, total catch rates varied without trend with notable highs in 1991, 2008 and 2012 and lows in 1999, 2003, and 2006. Dark grey ribbons represent first and third quartiles while the light grey ribbons represent the 2.5% – 97.5% quantiles.

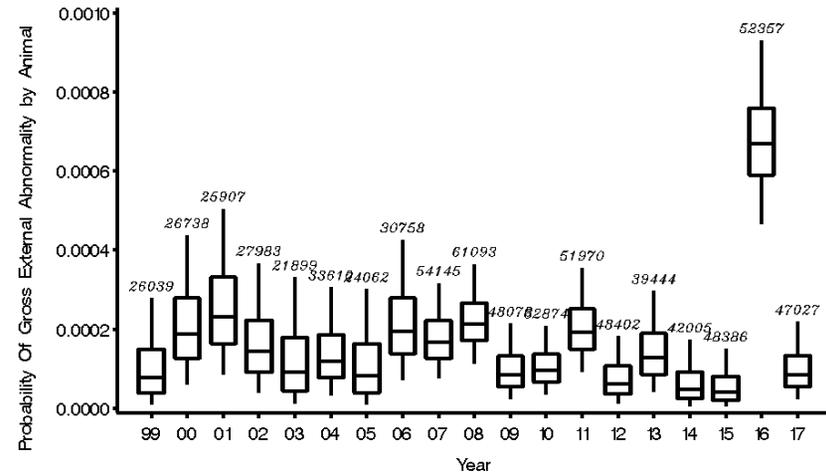


Fishery-Independent Monitoring: The index of abundance for young-of-the-year (YOY) pinfish on the Atlantic coast has fluctuated without major trend since 1997 but with a notable peak in 2010 followed by more average conditions. Gulf coast YOY abundance has also fluctuated but without much trend. Abundance peaked in 2010 but has declined since then. Post-YOY abundance follows a cyclical pattern on the Atlantic coast with highs in 2002, 2004, and 2011 but there has been a decline in recent years. The Gulf coast post-YOY index has varied without trend over the timeseries.

Atlantic Coast Proportion to Total Collected

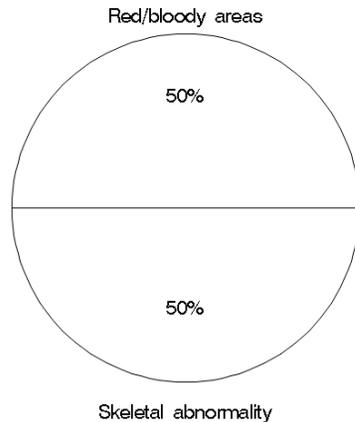


Gulf Coast Proportion to Total Collected



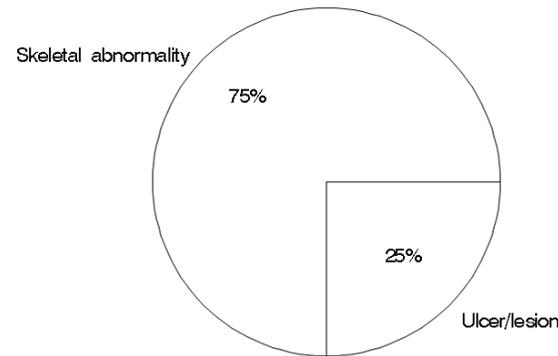
Atlantic Coast Percentage of Abnormality Types

Percentage of gross external abnormalities



Gulf Coast Percentage of Abnormality Types

Percentage of gross external abnormalities



Fish Health: Prevalence of gross external abnormalities have remained low and fluctuated without trend on both coasts except for a large increase in 2016. On the Atlantic coast in 2017, Pinfish were observed with red or bloody areas and skeletal abnormalities while on the Gulf coast, most were observed with skeletal abnormalities followed by ulcers or lesions.

Stock Status

Current Condition: No formal stock assessment for Pinfish is available at this time.