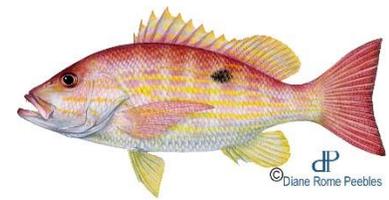
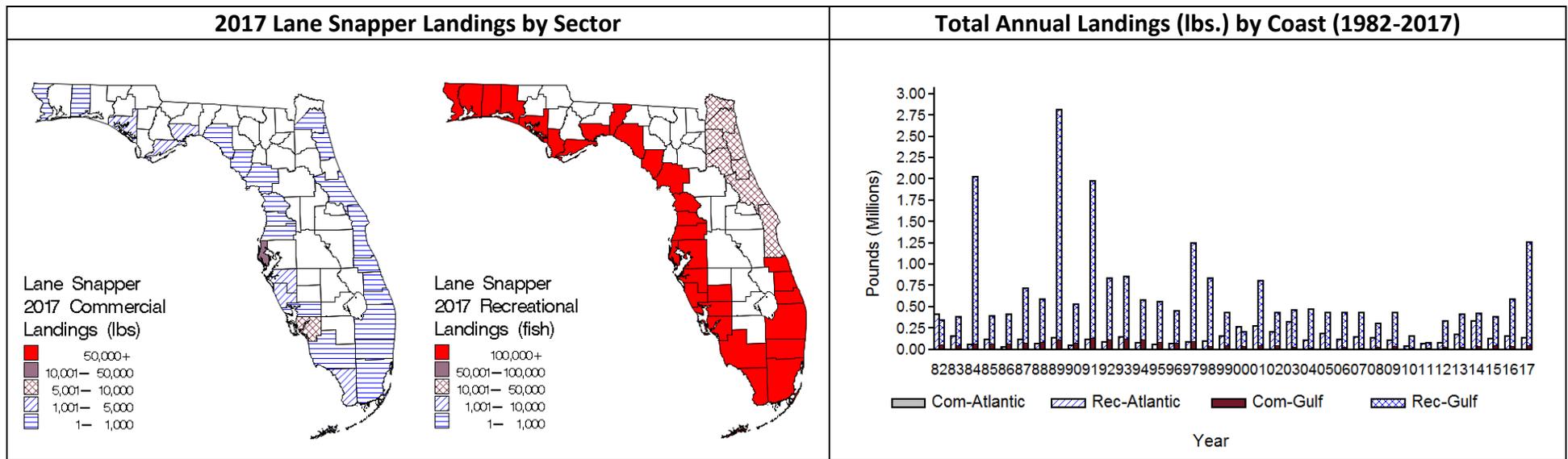


Lane Snapper, *Lutjanus synagris* (Linnaeus, 1758)



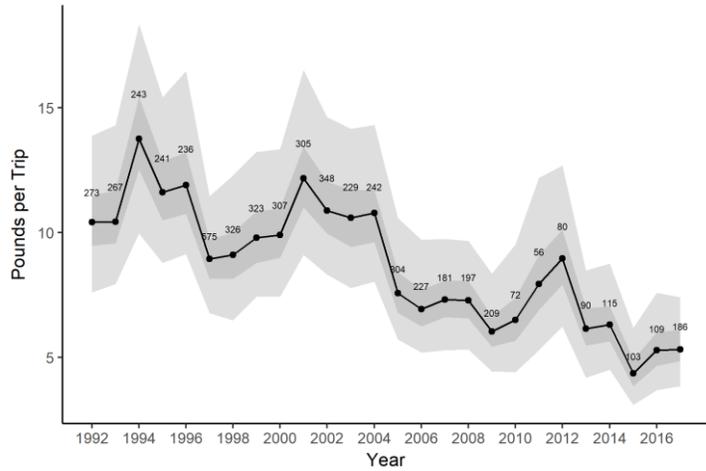
Life History

In Florida waters, Lane Snapper are found over a variety of bottom types, including reefs, rocky outcrops, shipwrecks, smooth bottom in association with seagrass, and mangrove prop roots. The species ranges from northern Florida south throughout the Gulf of Mexico and Caribbean south to southeastern Brazil. Lane Snapper are found in two genetically distinct groups in the northern Gulf of Mexico, a western group from south Texas to Alabama and an eastern group which includes the east and west coasts of peninsular Florida (Karlsson *et al.* 2009). Spawning occurs from March through September; peak spawning activity occurs during June–August (Manooch 1984). Both sexes mature at age 1 or as small as 5.9 inches total length (TL). Lane Snapper have been aged up to 19 years off of Bermuda (Luckhurst *et al.* 2000) and to 17 years in the northern Gulf of Mexico (Johnson *et al.* 1995). Lengths at age are larger in the northern gulf through about age 10; males were generally larger than females, at least through age 9. Juvenile Lane Snapper consume mostly amphipods, decapods, and fishes (Franks and VanderKooy 2000). The most important prey items were shrimp-remains, shrimp, *Latreutes parvulus*; and fish-remains.

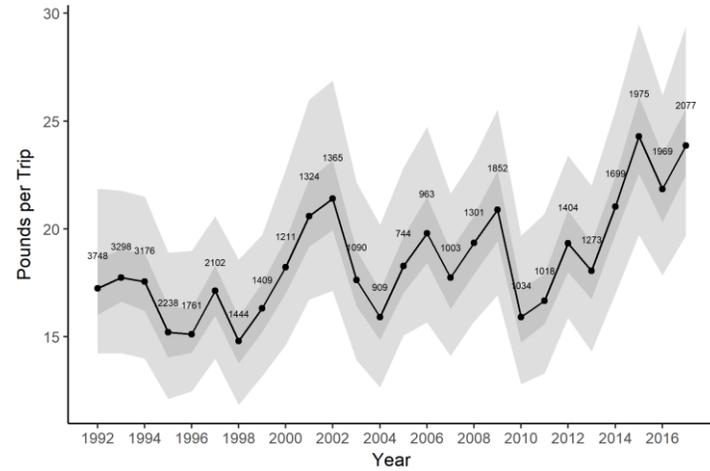


Fishers landed 1,387,040 pounds in 2017 which were 132.4% higher than the previous 5-year average (2012–2016). Coastwide, 90.2% of these were from the Gulf and 9.8% were from the Atlantic. Recreational landings constituted 96.8% of the total landings.

Atlantic Coast

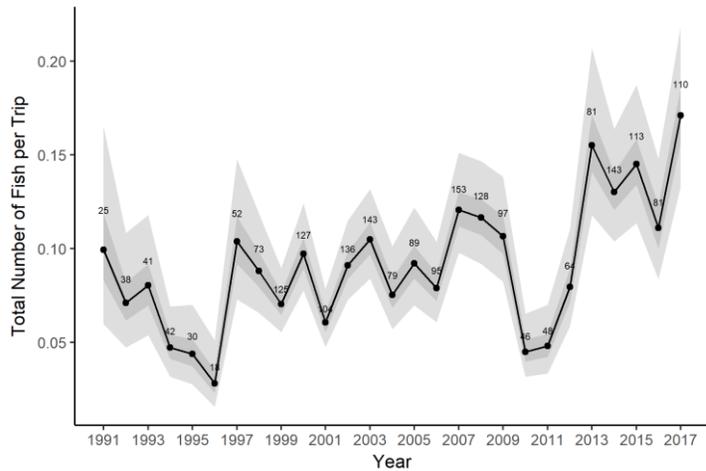


Gulf Coast

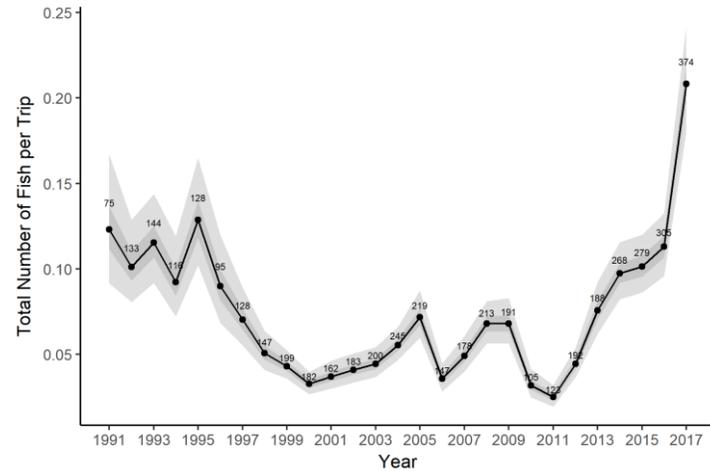


Standardized Commercial Catch Rates: Commercial catch rates on the Atlantic coast have varied cyclically with high rates in 1997-2001, and 2010-2012, and lower catch rates in 1994, 2002 -2009, and 2013 - 2017. Commercial catch rates on the Gulf Coast were stable until 1998 and then displayed a cyclical pattern with lows in 2004 and 2010 and highs in 2002, 2009, and most recently in 2015 – 2017. Dark grey ribbons represent first and third quartiles while the light grey ribbons represent the 2.5% – 97.5% quantiles.

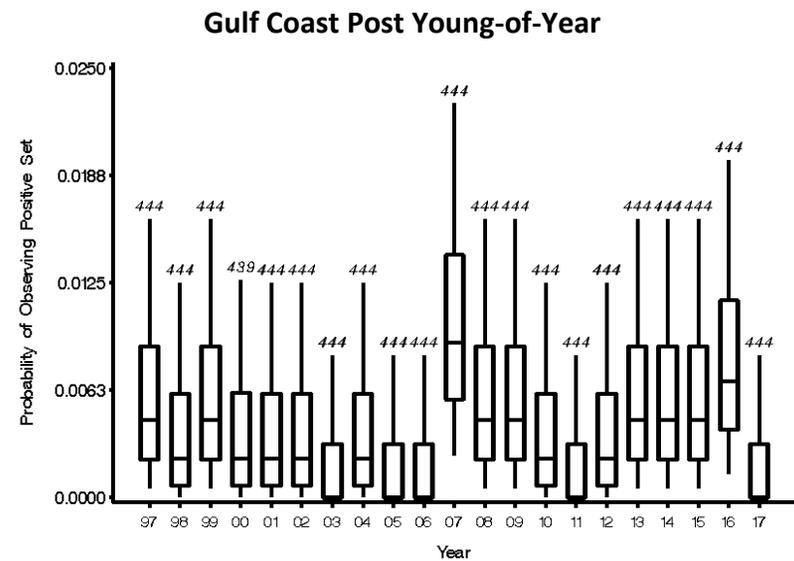
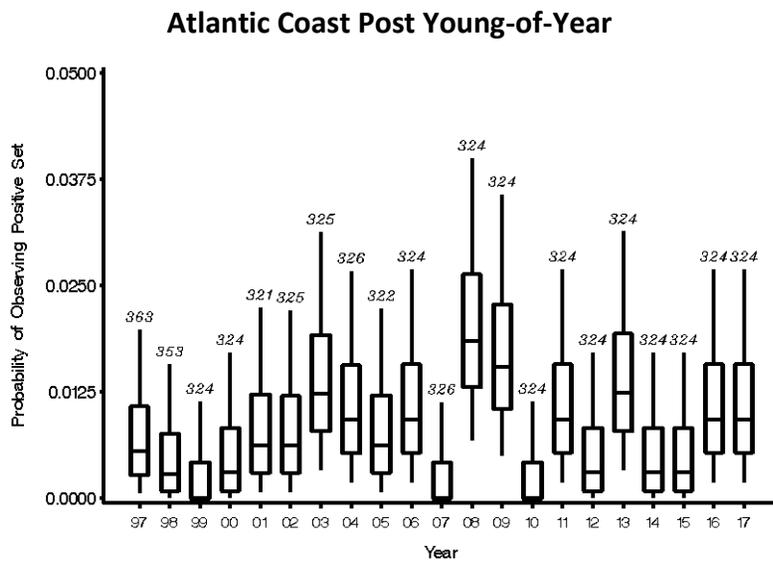
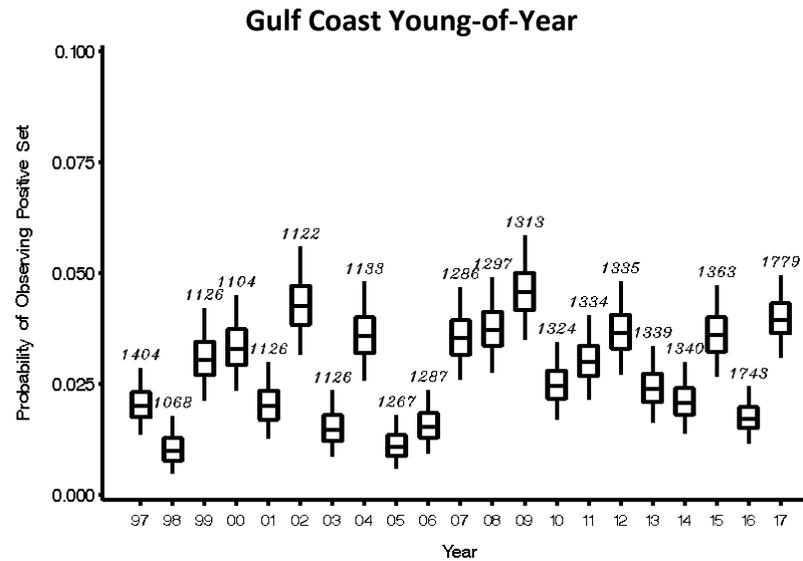
Atlantic Coast



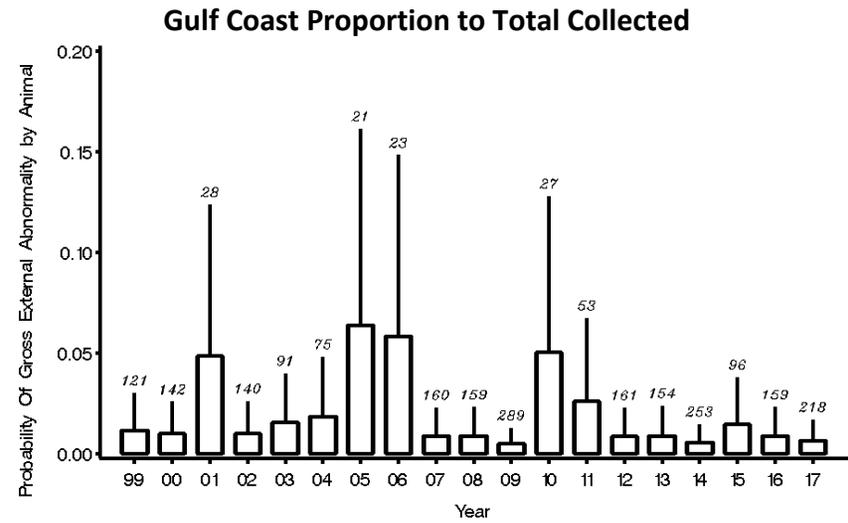
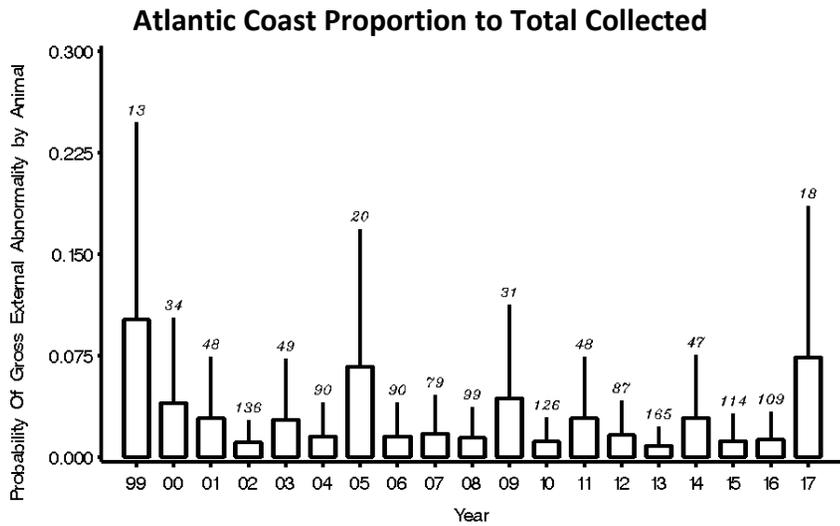
Gulf Coast



Standardized Recreational Total Catch Rates: Atlantic coast recreational angler total catch rates, which have shown higher values since 1997, have been variable yet stable on the Atlantic coast from 1998-2012, with a steep increase from 2013-2017. Recreational catch rates on the Gulf coast were stable from 1992-1995, followed by a steep decrease from 1996-2000, variable yet stable rates from 2001-2012, with recent increases through 2017. Dark grey ribbons represent first and third quartiles while the light grey ribbons represent the 2.5% – 97.5% quantiles.



Fishery-Independent Monitoring: Fishery-independent-monitoring data show strong young-of-the-year (YOY) recruitment occurring in 2002, 2004, 2009, 2012, 2015, and 2017 on the Gulf coast. Too few YOY were collected on the Atlantic coast to determine trends. For post-YOY fish, there appeared to be a variable, yet stable pattern on the Atlantic coast with lows in 1999, 2007, 2010, 2012, 2014-2015 and highs in 2003, 2008-2009, and 2013. Abundances of post-YOY Lane Snapper on the Gulf coast were too low to discern any clear trends but there were high abundances in 2007 and 2016.



Atlantic Coast Percentage of Abnormality Types

No Data Available

Gulf Coast Percentage of Abnormality Types

No Data Available

Fish Health: Incidences of gross external abnormalities were low and variable for Lane Snapper from 1999 to 2017 on both coast.

Stock Status

Current Condition: unknown

Management History: An 8-inch minimum size limit for Lane Snapper was implemented in February 1990. The Snapper-Grouper Assessment Panel of the South Atlantic Fishery Management Council found that there were insufficient data to evaluate the condition of the stocks quantitatively and assumed that the stocks were not overfished nor undergoing overfishing. Yield-per-recruit analyses of Lane Snapper in Puerto Rico showed that yield increased as the length-at-capture was increased to about 7.9 inches fork length (FL) and when the instantaneous fishing mortality (F) was higher than 0.5 per year (Acosta and Appeldoorn 1992). The fishery in Puerto Rico was harvesting 91% of the potential yield with an age at entry to the fishery that corresponded to 9.8 inches FL and an F of 1.13 per year. Estimated fishing mortality in the northern Gulf of Mexico during 1991–1994 was one to three times that of Lane Snapper’s likely natural mortality rate (Johnson et al. 1995). This would suggest that Lane Snapper were being overfished at that time. No detailed assessment of the condition of Lane Snapper is available at this time.