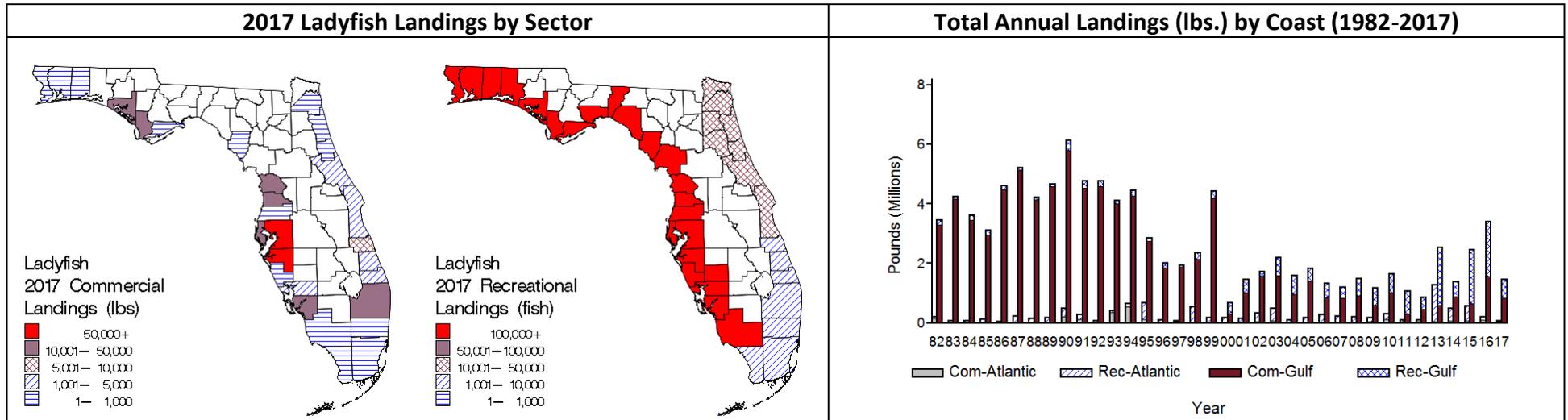


Ladyfish, *Elops saurus* (Linnaeus, 1766)



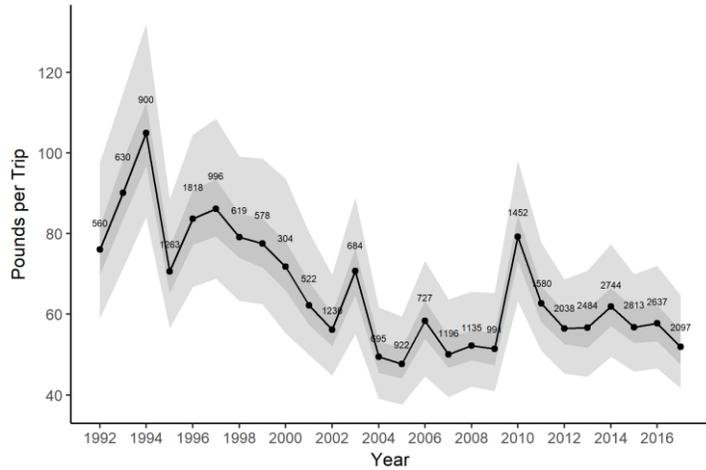
Life History

Ladyfish are found throughout Florida's nearshore and estuarine habitats. In the western Atlantic, Ladyfish range from southern New England and Bermuda, throughout the Gulf of Mexico, to Rio de Janeiro, Brazil (Bigelow and Schroeder 1953). There may be more than one species or stock of Ladyfish in Florida waters: a southern low-myomere-count stock and a northern, high-myomere-count stock (Eldred and Lyons 1966; Smith 1989). Late larval and juvenile Ladyfish inhabit coastal beaches, canals, rivers, and mosquito impoundments (Gilmore *et al.* 1981). In general, juveniles seek waters with lower than full-strength salinity: 23 ppt–25 ppt (McBride *et al.* 2001). Adults usually live in coastal or nearshore areas. Length-frequency analysis suggests Ladyfish in Tampa Bay grow to 200 mm–300 mm standard length by age 1; by age 2, they reach 300 mm–400 mm, and they are larger than 400 mm by age 3 (McBride *et al.* 2001). Ladyfish that live in hypersaline lagoons in Cuba grow slower, reaching only 247-mm standard length at the time when their third annulus formed (Carles 1967). Ladyfish reach a maximum size of about 39 inches, a weight of about 15 pounds (Zale and Merrifield 1989), and possibly 6 years of age (Palko 1984). Based on the spatial and temporal patterns of collections of early larvae, spawning probably occurs in offshore waters during the fall (Hildebrand 1943). Adult Ladyfish feed primarily on fish. Sekavec (1974) found that fish constituted 94% of food items found in Ladyfish stomachs; Darnell (1958) also found that fish made up a substantial portion (82%) of the Ladyfish diet, and Knapp (1949) found that fish accounted for 34% of food items found in Ladyfish stomachs. In Sekavec's study, juvenile Gulf menhaden composed 72% of the identifiable fish consumed. Decapod crustaceans are also important foods for Ladyfish.

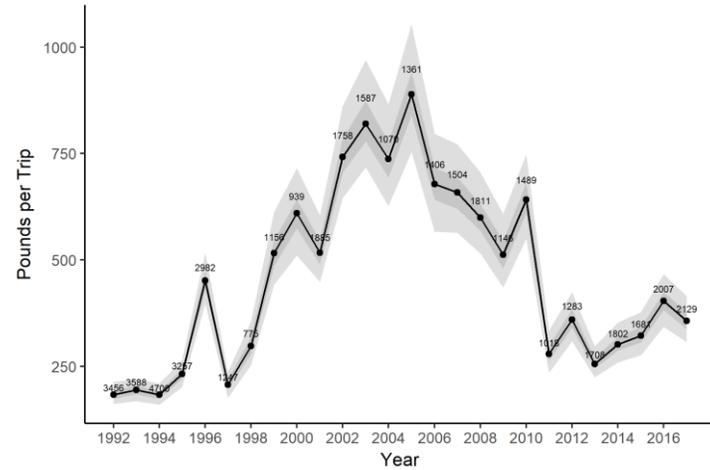


Fishers landed 1,531,153 pounds in 2017 which were 42.3% lower than the previous 5-year average (2012-2016). Coastwide, 95.7% of these were from the Gulf and 4.3% were from the Atlantic. Commercial landings constituted 55.8% of the total landings while recreational landings constituted 44.2%.

Atlantic Coast

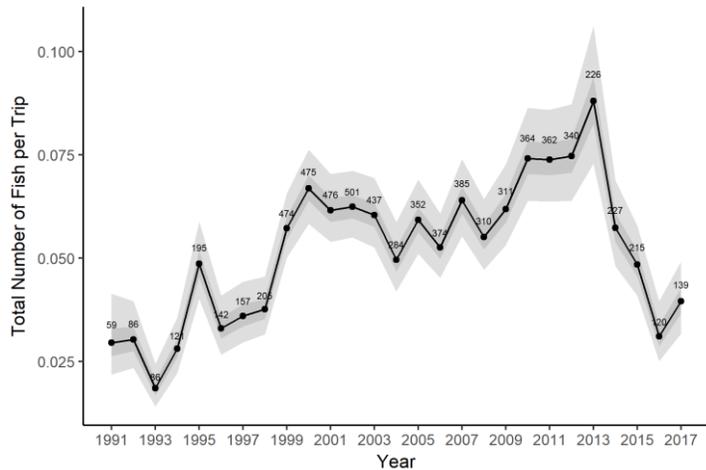


Gulf Coast

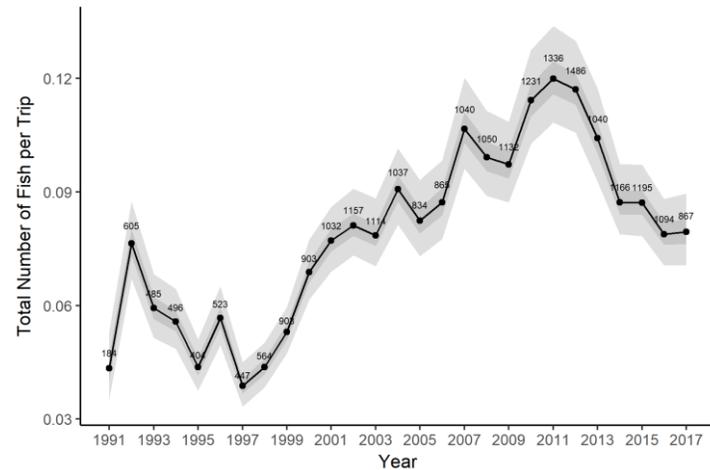


Standardized Commercial Catch Rates: Atlantic coast commercial catch rates declined through 2002 and have been variable but stable through 2017. Gulf coast commercial landings rates variably increased through 2005, decreased through 2011 to near former levels, and have remained stable. Dark grey figure lines represent first and third quartiles while the light grey lines represent the 2.5% – 97.5% quantiles.

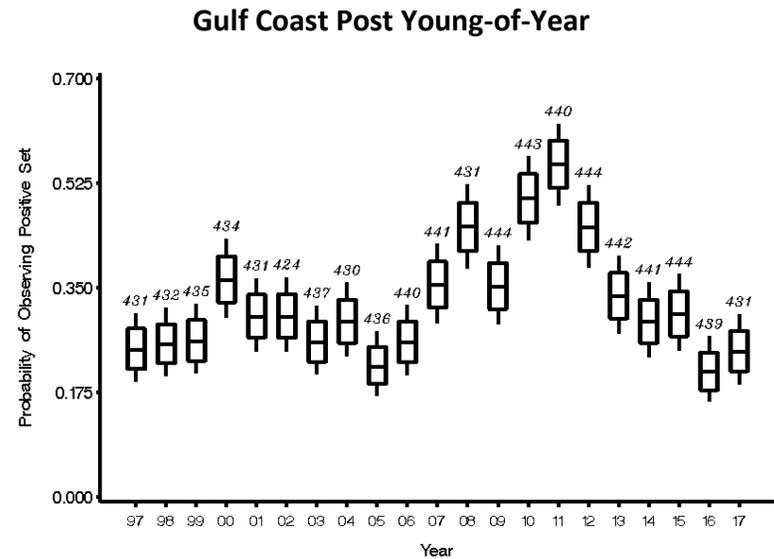
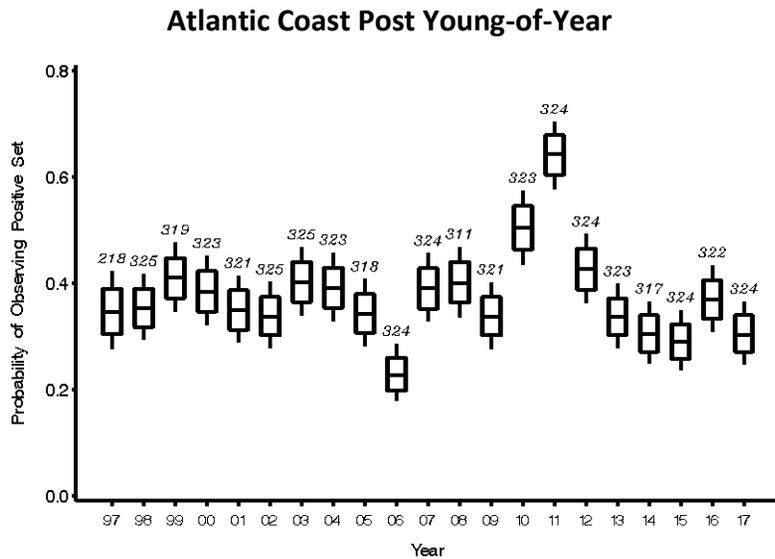
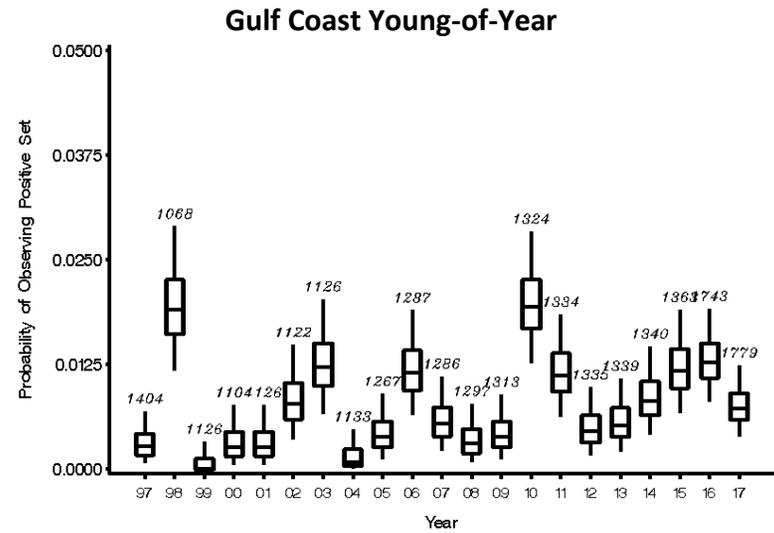
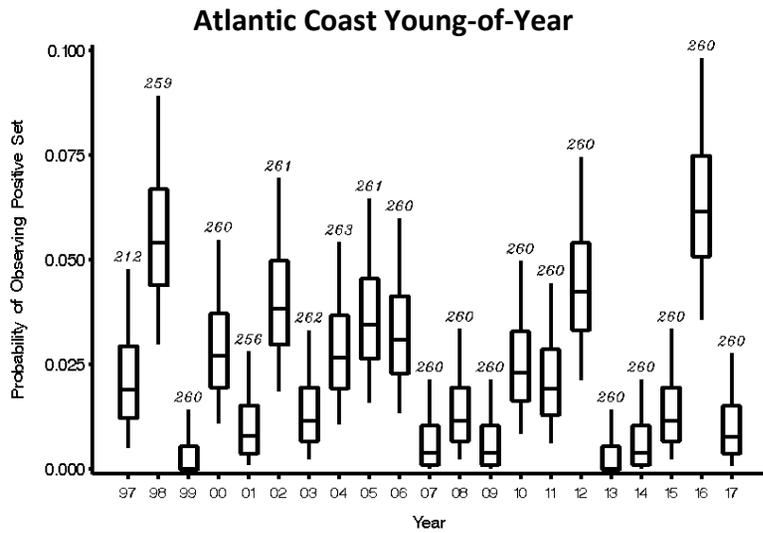
Atlantic Coast



Gulf Coast

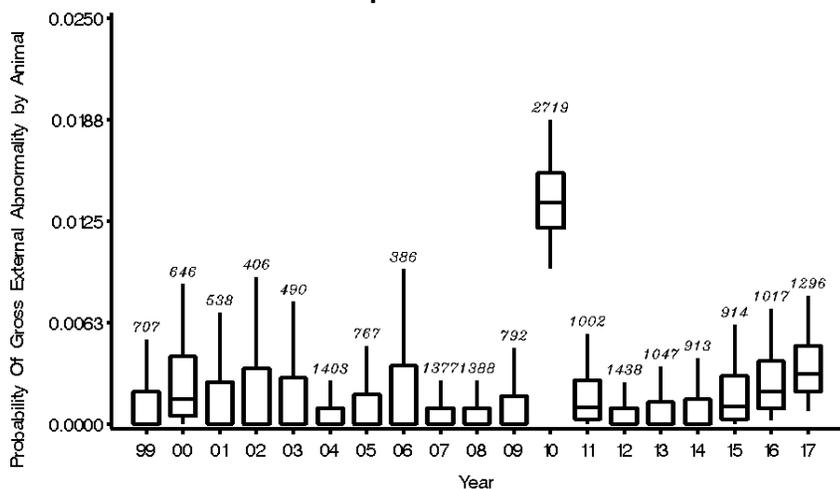


Standardized Recreational Total Catch Rates: Total catch rates for recreational anglers on the Atlantic coast variably increased through 2013 then steeply declined through 2017. On the Gulf, total catch rates increased from 1997-2011, then decreased through 2017. Dark grey figure lines represent first and third quartiles while the light grey lines represent the 2.5% – 97.5% quantiles.

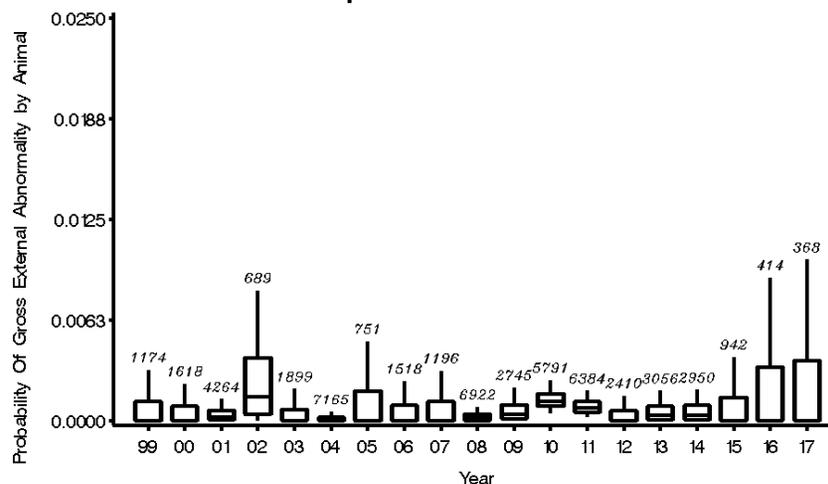


Fishery-Independent Monitoring: The indices of abundance for young-of-the-year (YOY) Ladyfish fluctuated without trend on both coasts with strong year classes in 1998, 2012, and 2016 on the Atlantic coast and 1998, 2003, 2006, 2010, and 2015-2016 on the Gulf coast. Abundances of post-YOY Ladyfish display similar trends on both coasts. Abundances have remained fairly steady through 2006, increased through 2011, then decreased and stabilized to former levels of abundances

Atlantic Coast Proportion to Total Collected

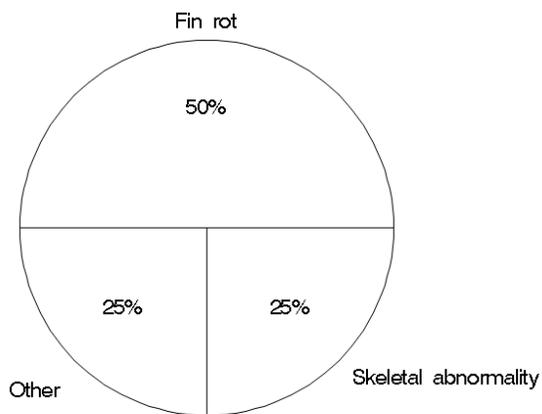


Gulf Coast Proportion to Total Collected



Atlantic Coast Percentage of Abnormality Types

Percentage of gross external abnormalities



Gulf Coast Percentage of Abnormality Types

No Data Available

Fish Health: External abnormalities of Ladyfish on the Atlantic coast were highly observed in 2010 with recent increases in occurrences from 2015-2017. Half of the observed abnormalities were from fin rot followed by skeletal abnormalities. Occurrence of gross external abnormalities on the Gulf coast was consistent from year to year with no discernible trend on the Gulf coast.

Stock Status

Current Condition: unknown

Management History: In Florida, Ladyfish are termed “unregulated” recreational species but which still carry a two fish or 100 pounds per person per day (whichever is more) regulation established by Florida Statute. There has been no formal stock assessment for Ladyfish in Florida.