



Sea catfishes, Family Ariidae

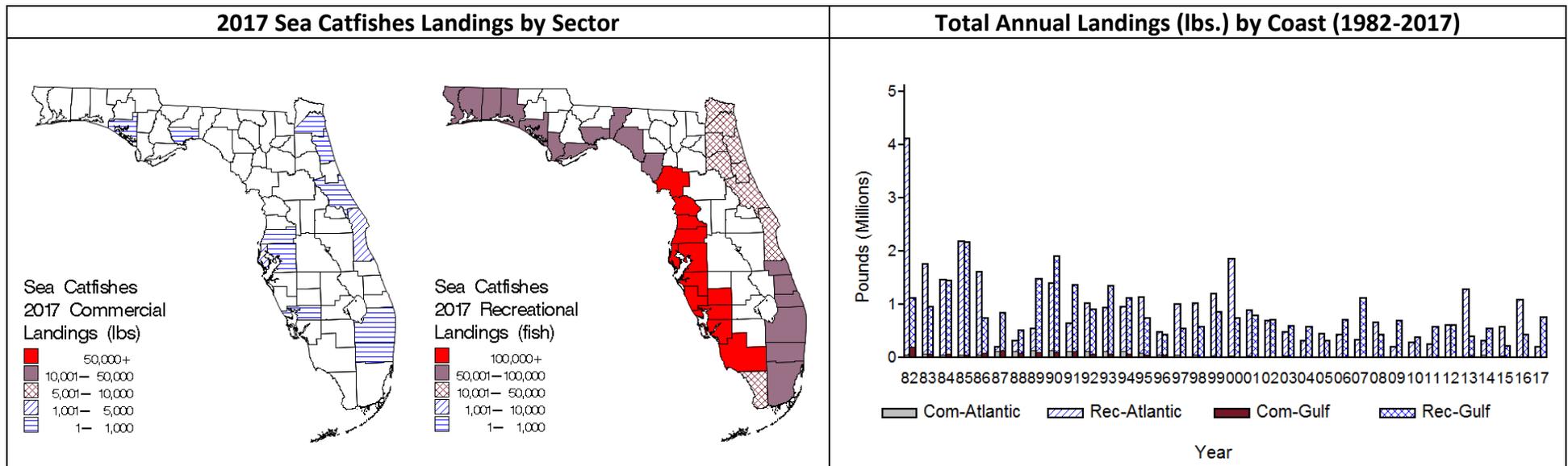
Hardhead Catfish, *Ariopsis felis* (Linnaeus, 1758)



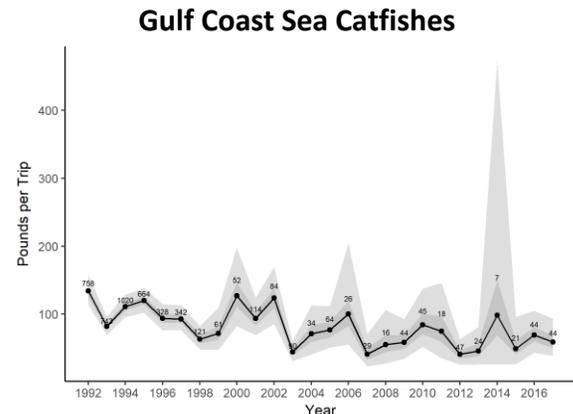
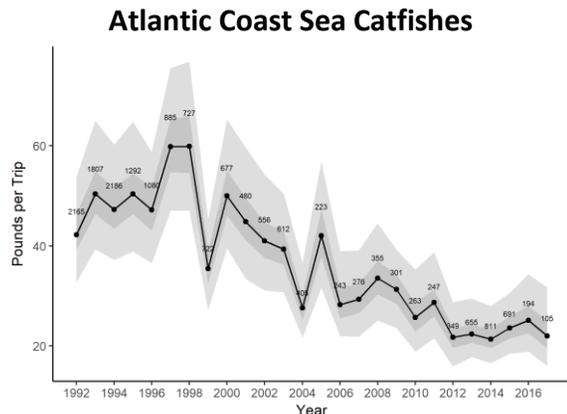
Gafftopsail Catfish, *Bagre marinus* (Mitchell, 1815)

Life History

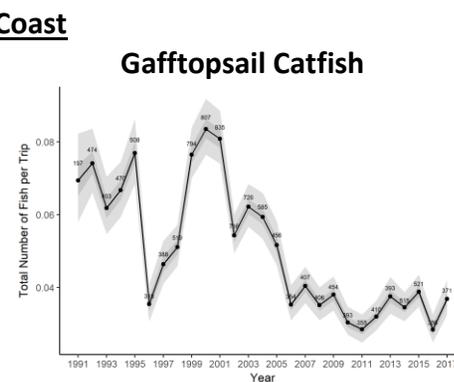
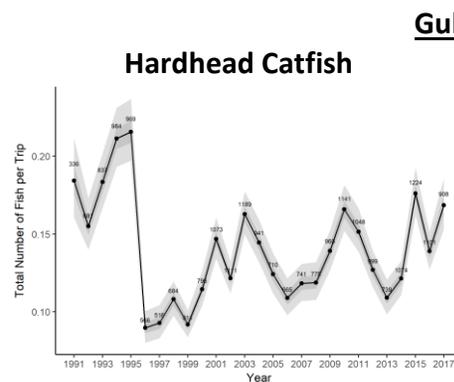
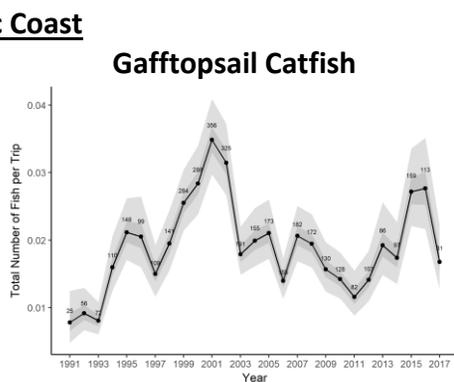
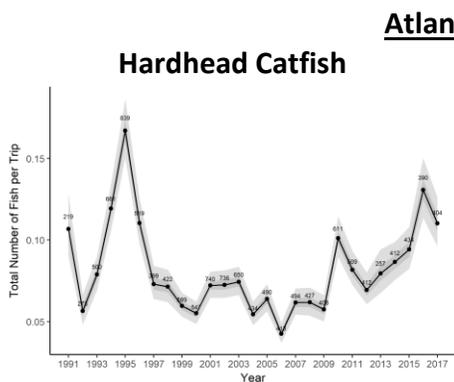
Two species of sea catfishes occur in Florida waters: the Hardhead Catfish, *Ariopsis felis*, and the Gafftopsail Catfish, *Bagre marinus*. Both species inhabit estuarine and nearshore waters throughout Florida. According to reports, the Gafftopsail Catfish also occurs in freshwater. Although not favored by anglers as sport or food fishes, anglers easily catch sea catfishes because the fish are broadly distributed and opportunistic feeders. Adult hardhead and Gafftopsail Catfish will move out of estuarine waters to nearshore coastal waters to avoid water temperatures below 25 °C. A length of about 4.7" standard length (SL) is apparently reached by age 1. Past studies have reported that Hardhead Catfish reach a maximum age of 5–8 years (Doermann *et al.* 1977), and females mature to spawn at about 2 years of age and 4.7"–7.9" SL. The smallest mature Gafftopsail Catfish reported in the literature was 10.4" SL. However, unvalidated evidence indicates that maximum age for both species may be as old as 25 years and maturity is not reached by either species until age 5 (FWC-FWRI, unpublished data). Hardhead Catfish spawn from May to August in back bays; Gafftopsail Catfish spawn during May–August over inshore mudflats. Males of both species exhibit oral gestation behavior, carrying the fertilized eggs, larvae, and small juveniles in their mouths (Muncy and Wingo 1983). The similar diets of gafftopsail and Hardhead Catfish include algae, seagrasses, coelenterates, holothuroidians, gastropods, polychaetes, crustaceans, and fishes (Merriman 1940).



Fishers landed 932,081 pounds in 2017 which were 22% lower than the previous 5-year average (2012-2016). Coastwide, 79.5% of these were from the Gulf and 20.5% were from the Atlantic. Recreational landings constituted 99.4% of the total landings.

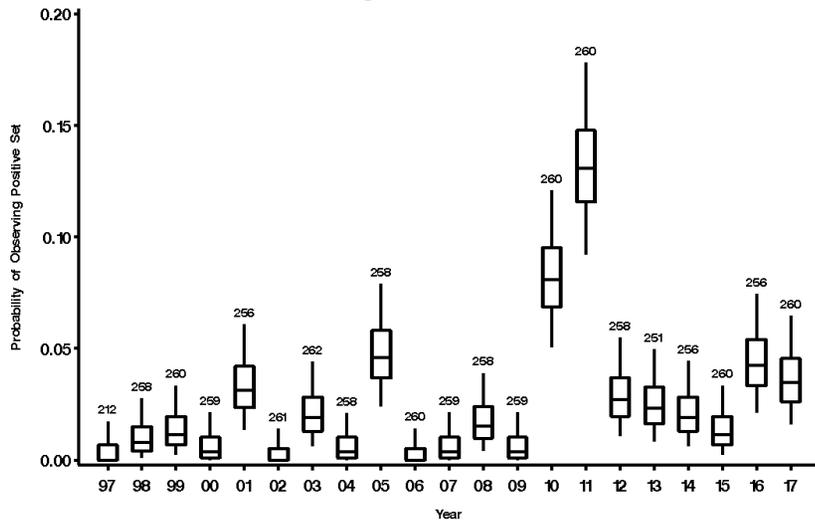


Standardized Commercial Catch Rates: Atlantic coast commercial catch rates have been declined from 1998-2012 and have remained low and stable. Gulf coast commercial landings rates have varied and may be attributed to low numbers of trips sampled which caught sea catfishes. Dark grey figure lines represent first and third quartiles while the light grey lines represent the 2.5% – 97.5% quantiles.

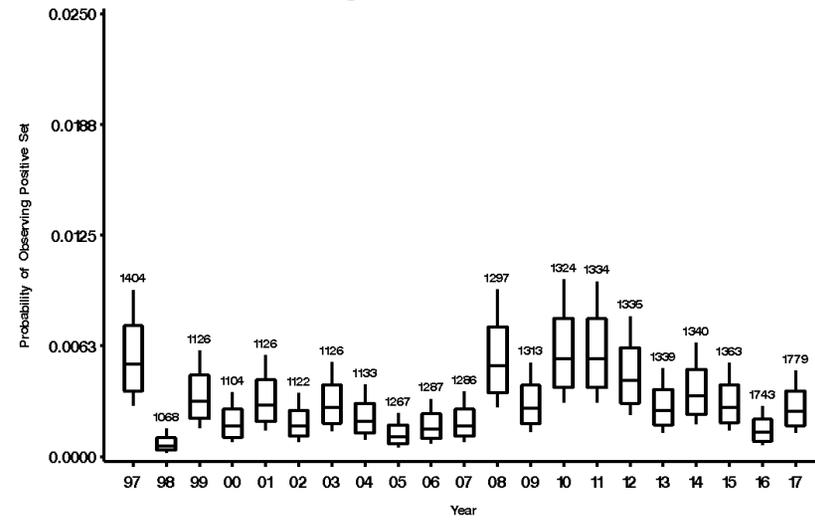


Standardized Recreational Total Catch Rates: On the Atlantic coast, total recreational catch rates for Hardhead Catfish have increased in trend since 2010. Gafftopsail Catfish catch rates are back down in 2017 after increasing again since 2011. On the Gulf coast, Hardhead Catfish catch rates have been variably increasing since 1996 and Gafftopsail Catfish catch rates have been stable yet variable since 2006. Dark grey figure lines represent first and third quartiles while the light grey lines represent the 2.5% – 97.5% quantiles.

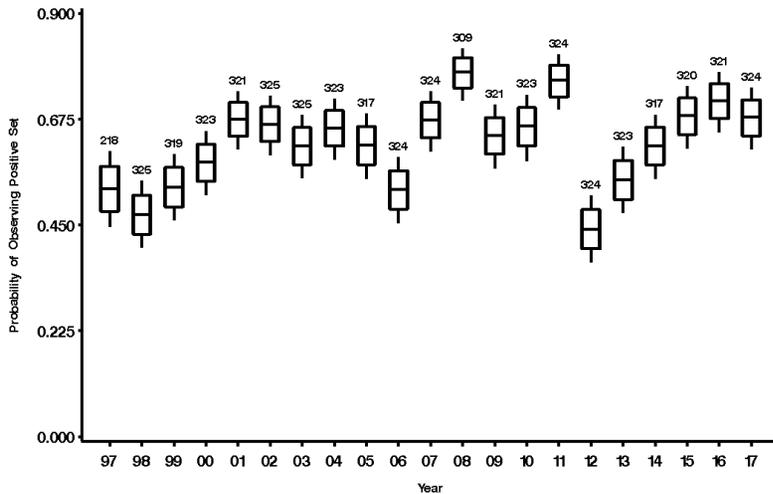
Atlantic Coast Young-of-Year Hardhead Catfish



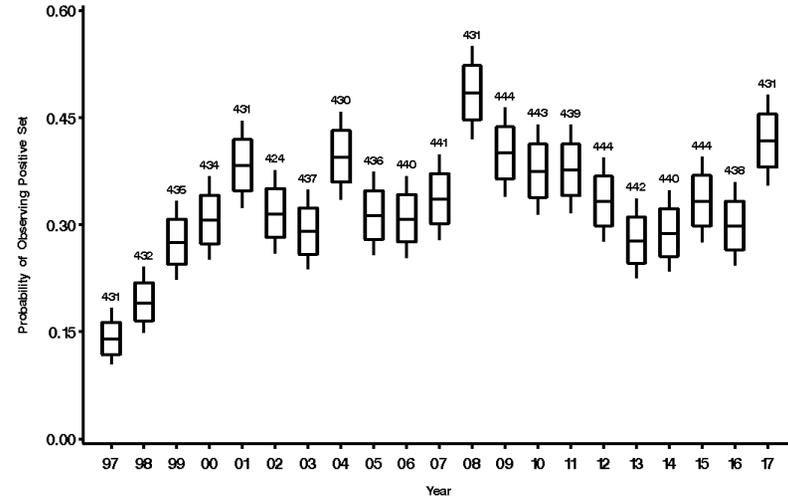
Gulf Coast Young-of-Year Hardhead Catfish



Atlantic Coast Post Young-of-Year Hardhead Catfish

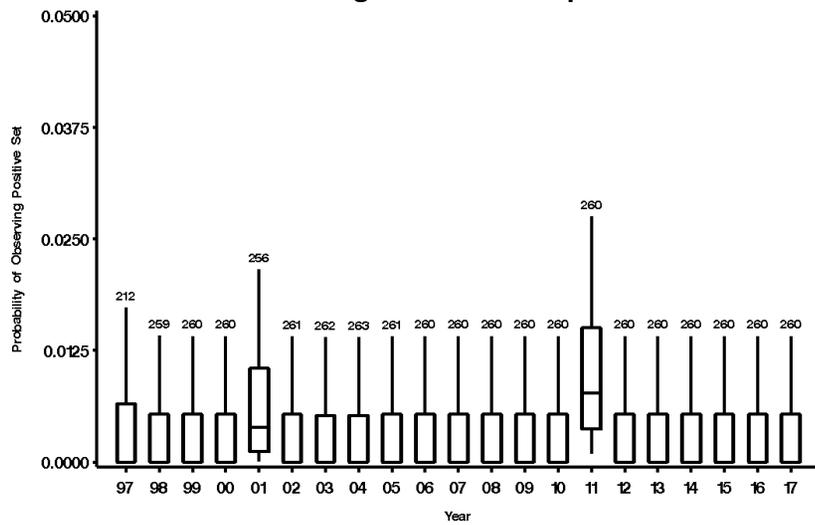


Gulf Coast Post Young-of-Year Hardhead Catfish

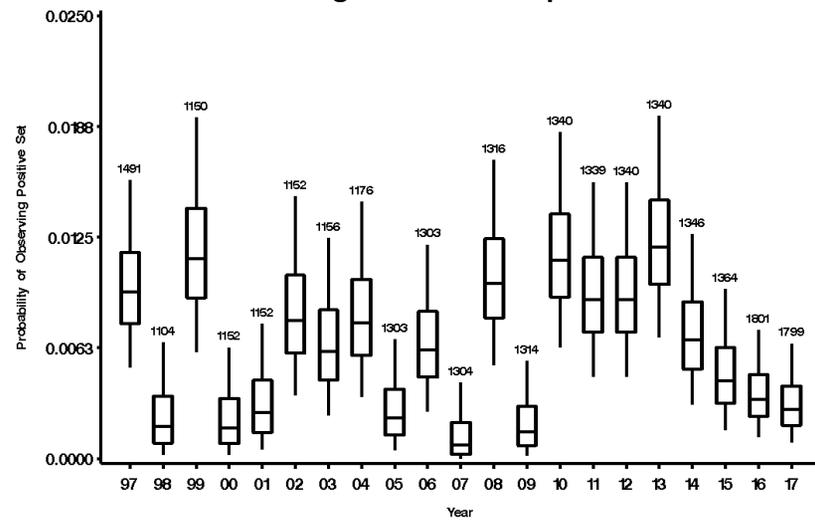


Fishery-Independent Monitoring: Indices of abundance for young-of-the-year (YOY) Hardhead Catfish show no discernible trend over time but do indicate stronger year classes in 2001, 2005, 2010-2011, and 2016-2017 on the Atlantic coast. On the Gulf coast, stronger year classes were in 1997, 2008, and 2010-2011. On both coasts, abundances of post-YOY Hardhead Catfish increased from 1997 to 2001, have been relatively stable through 2011. After decreasing in 2012, abundance trends increased again.

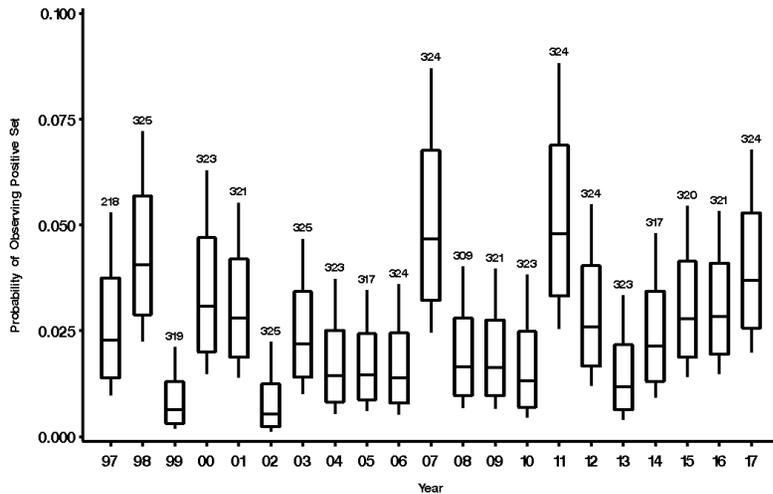
Atlantic Coast Young-of-Year Gafftopsail Catfish



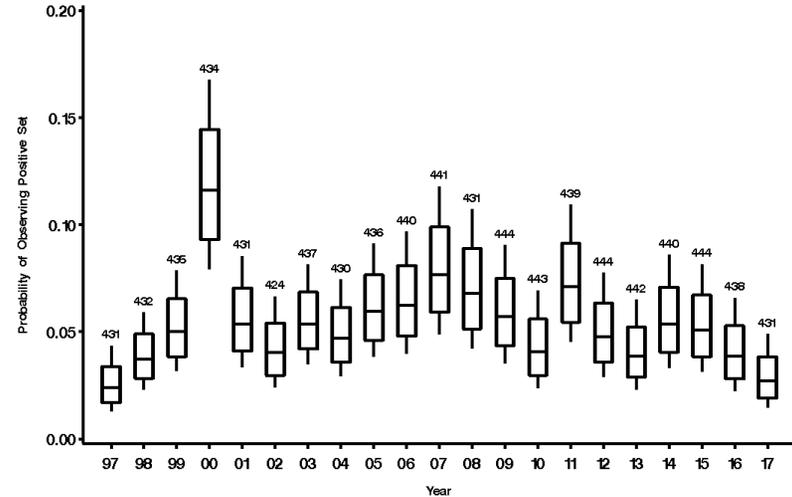
Gulf Coast Young-of-Year Gafftopsail Catfish



Atlantic Coast Post Young-of-Year Gafftopsail Catfish

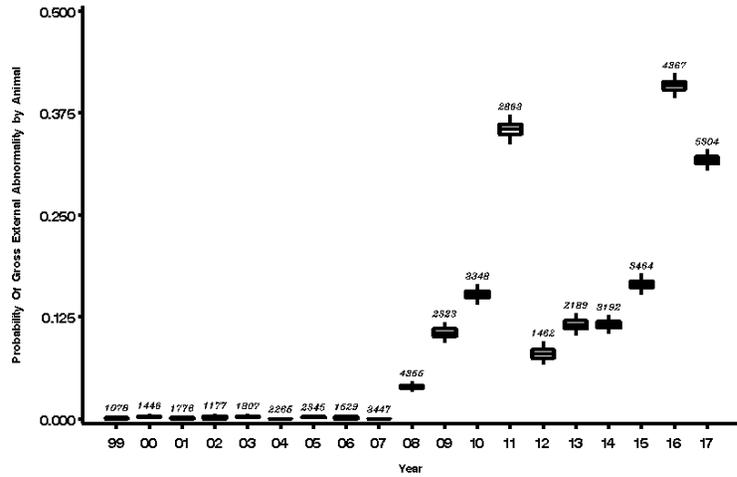


Gulf Coast Post Young-of-Year Gafftopsail Catfish

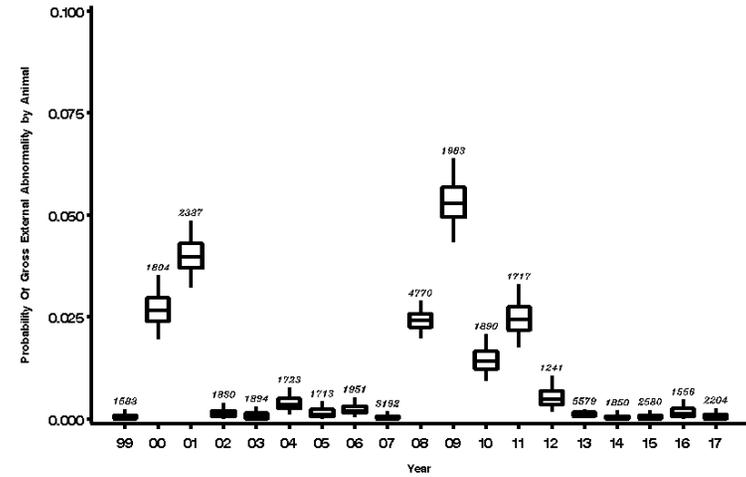


Fishery-Independent Monitoring: There were very few YOY Gafftopsail Catfish captured on the Atlantic coast. Gulf coast abundances have been highly variable with a decreasing trend since 2013. Post-YOY Gafftopsail Catfish were most abundant in 1998, 2007, and 2011 on the Atlantic coast but no trends were apparent. On the Gulf coast the index of abundance increased from 1997 to a peak in 2000, after which abundances decreased back down and have remained fairly stable through 2017.

Atlantic Coast Proportion to Total Collected

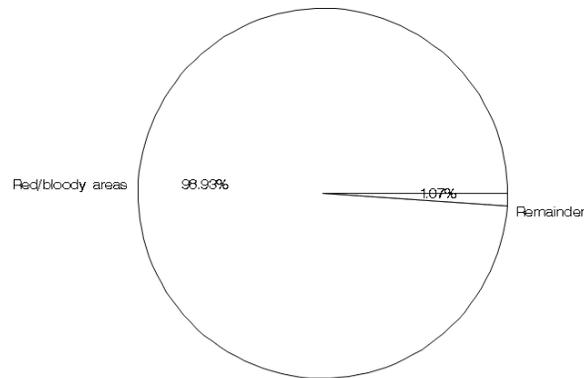


Gulf Coast Proportion to Total Collected



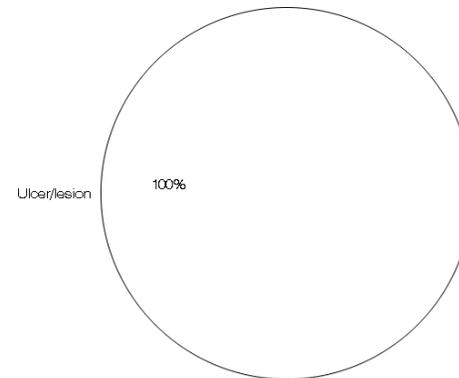
Atlantic Coast Percentage of Abnormality Types

Percentage of gross external abnormalities



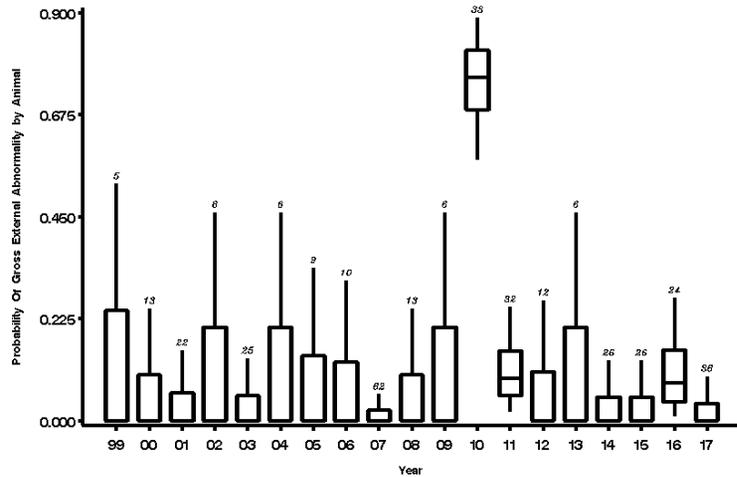
Gulf Coast Percentage of Abnormality Types

Percentage of gross external abnormalities

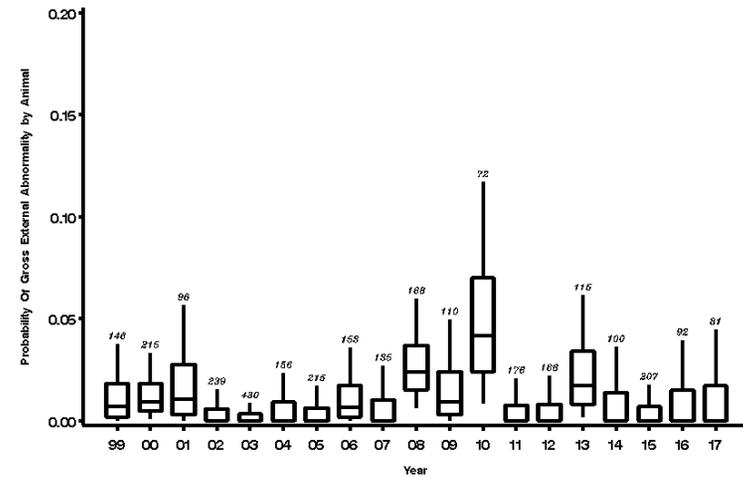


Fish Health: Incidence of gross external abnormalities in Hardhead Catfish varied without trend on the Atlantic coast until a steep increase in 2008-2011. Incidences decreased sharply in 2012 but then increased again in similar trend. On the Gulf coast occurrences of abnormalities were elevated in 2000-2001, and 2008-2011. Red and bloody areas were the most common abnormality observed in Hardhead catfish on the Atlantic coast while ulcers/lesions were the most common abnormality observed on the Gulf coast.

Atlantic Coast Proportion to Total Collected



Gulf Coast Proportion to Total Collected



Atlantic Coast Percentage of Abnormality Types

No Data Available

Gulf Coast Percentage of Abnormality Types

No Data Available

Fish Health: For Gafftopsail Catfish, gross external abnormalities were reported to be low on the Atlantic coast apart from a considerable increase in 2010. The Gulf coast proportions remained low until peak years in 2008 and 2010, and have remained relatively low through 2017.

Stock Status

Current Condition: unknown

Management History: In Florida, Hardhead and Gafftopsail Catfishes 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. Stocks of Hardhead Catfish and Gafftopsail Catfish in Florida appeared to be in good condition in 1995 (Armstrong et al. 1996c). The available data showed that populations for both species consisted of many abundant age groups; such data are indicative of low mortality.