



# *State of our Seafood: North Carolina*

*DEPARTMENT OF ENVIRONMENTAL QUALITY*

Division of Marine Fisheries

NC Catch Summit Presentation | March 13, 2018

# *Division of Marine Fisheries*

North Carolina Division of Marine Fisheries is responsible for the stewardship of the state's marine and estuarine resources.

Jurisdiction: all coastal waters extending to 3 miles offshore

Mission: To ensure sustainable marine and estuarine fisheries and habitats for the benefit and health of the people of North Carolina.

## **Sections**

<b>Administration</b>	<b>Fisheries Management</b>	<b>License and Statistics</b>
<b>Habitat and Enhancement</b>	<b>Protected Resources</b>	<b>Marine Patrol</b>
<b>Administrative Services</b>	<b>Maintenance Services</b>	<b>Shellfish Sanitation &amp; Recreational Water Quality</b>

# *License and Statistics*

## Goals

- License fishery participants, both recreational and commercial
- Collect, process, and conduct analyses on fisheries data, to include catch, effort, and participation
- Collect biological data from recreational anglers
- Collect, analyze, and disseminate reliable social and economic data
- Provide timely and accurate data on commercial and recreational fisheries, licensing, and social and economic information to customers and fishery managers
- Provide excellent customer service

# *License and Statistics*

60  
Employees

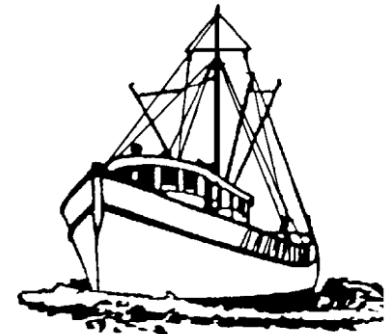


39 Permanent

21 Temporary

## **Section Programs**

- License
- Commercial Statistics
- Coastal Angling
- Fisheries Economics
- Administration



# *Trip Ticket Program*

Primary data source to describe activity and production of commercial fisheries in the NC.

Seafood dealer requirement

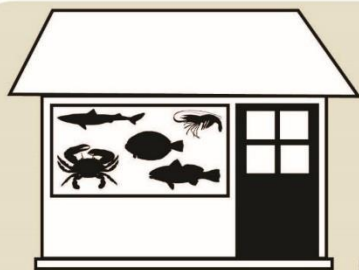
- Trip ticket for each transaction
- Info about fishermen, vessel, species, gear, and waterbody

Program processes ~150,000 trip tickets per year

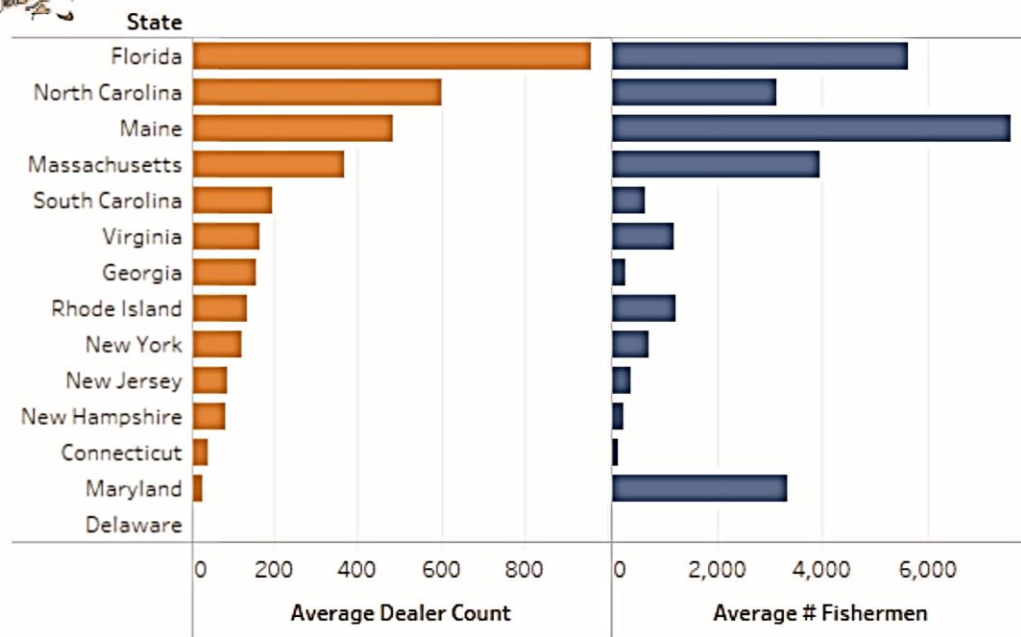
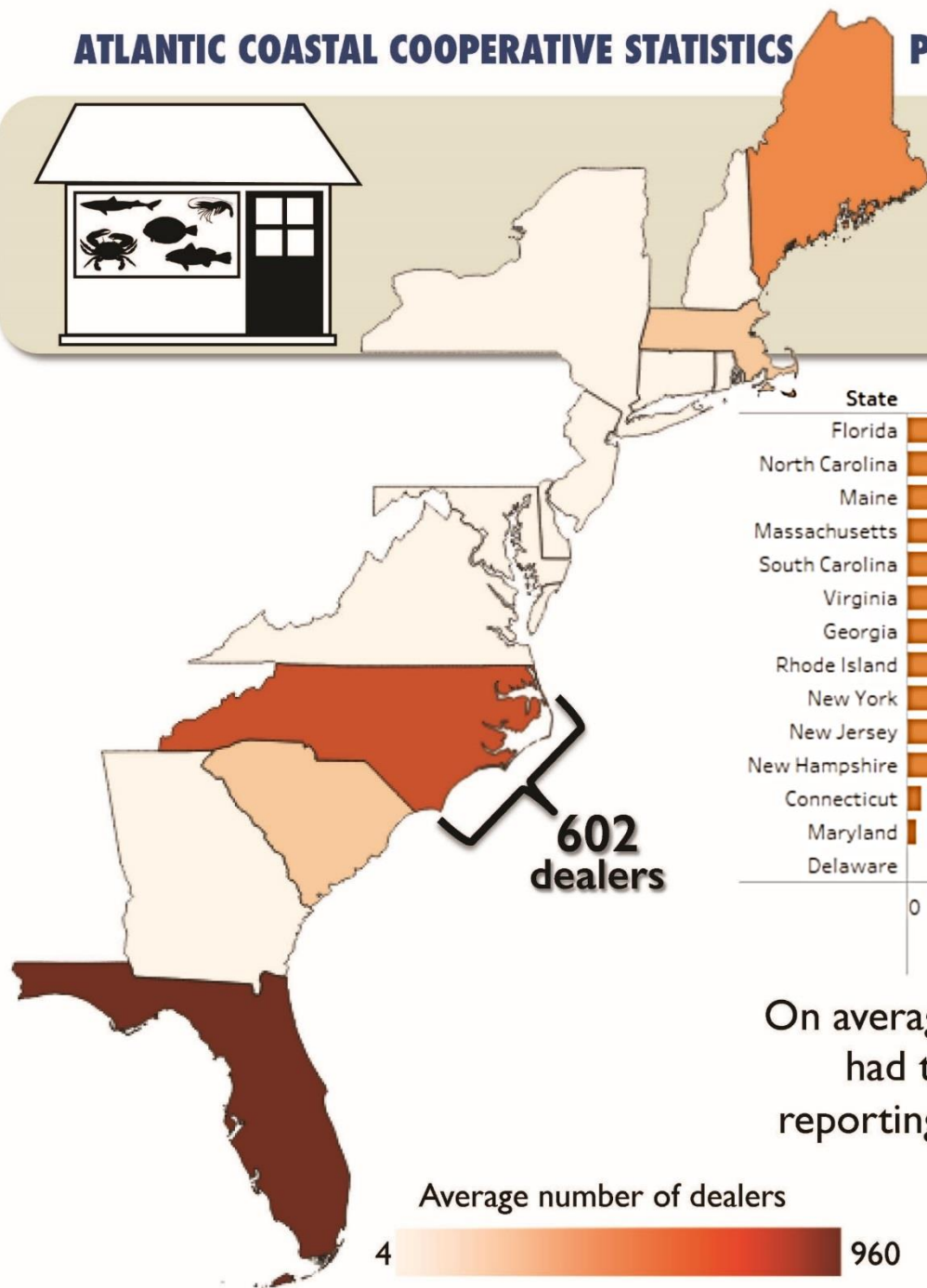
- Data are used in:
- Fishery management plans
  - Stock assessment models and reports
  - Socioeconomic impact analyses

Data are compiled and dispersed to fulfill data requests from the public, and regional and federal management councils and committees.



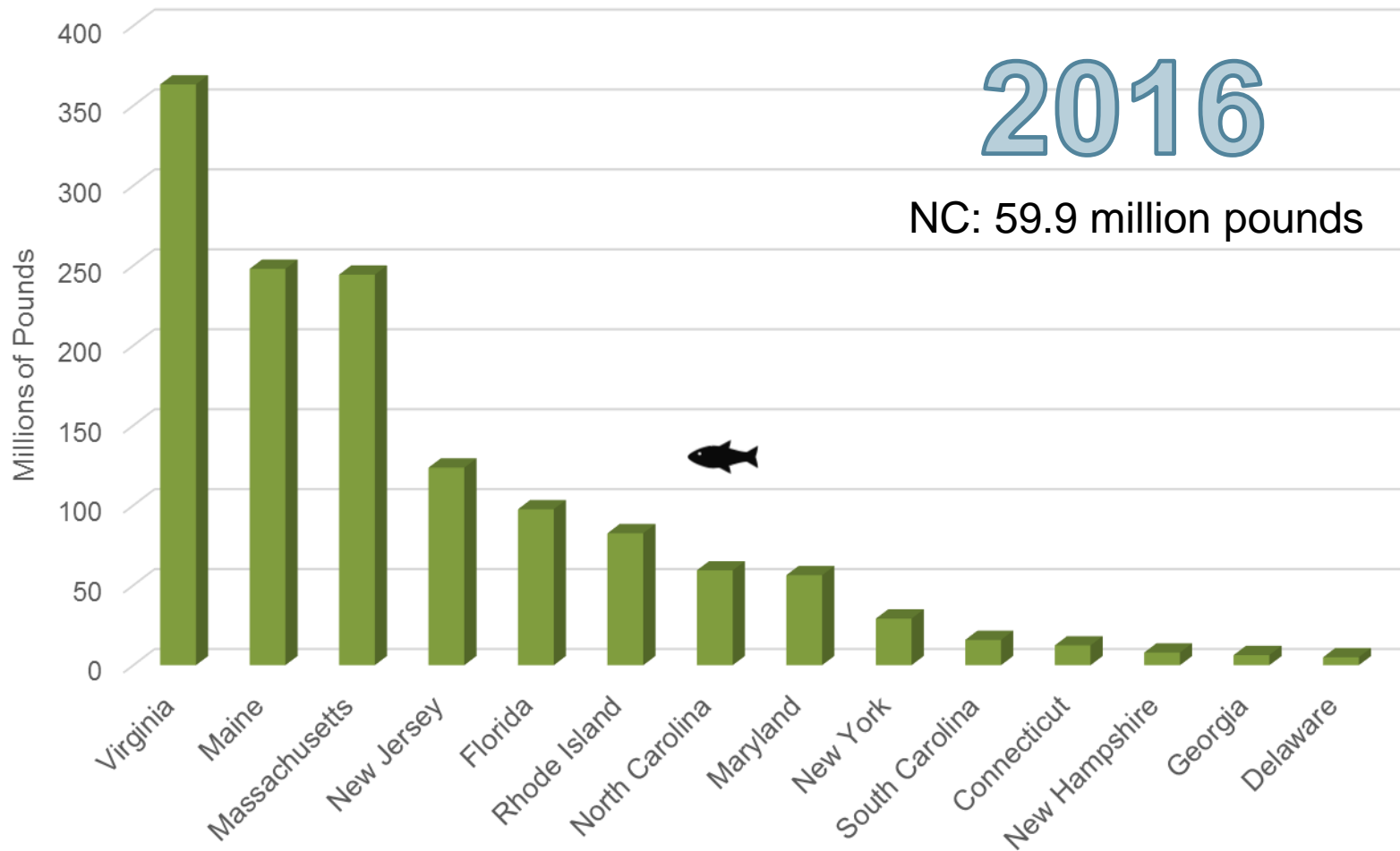


## Average Number of Dealers and Fishermen Submitting Landings Data, 2012-2016



On average over the last five years, North Carolina had the second highest number of dealers reporting landings per year on the Atlantic Coast.

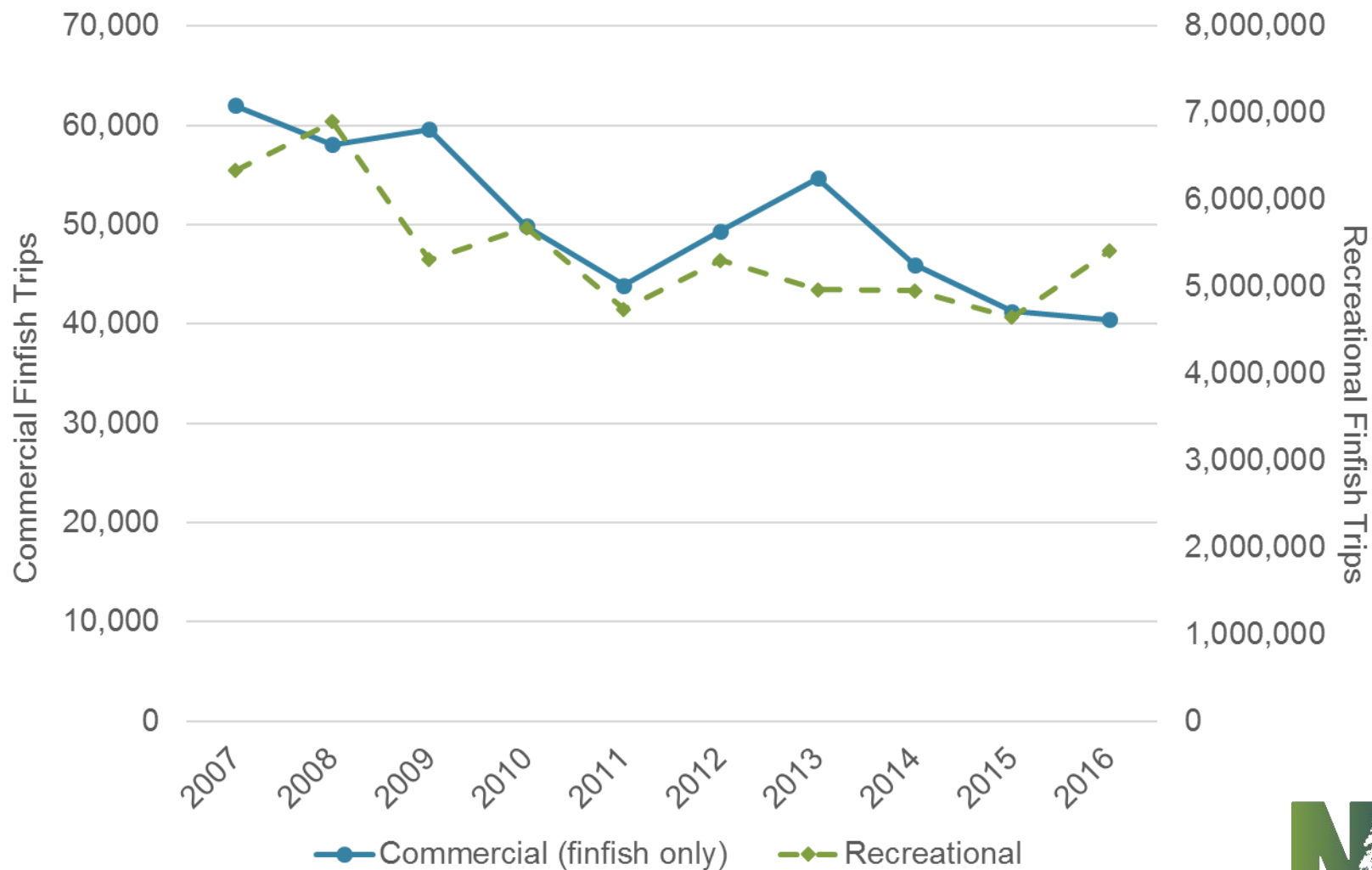
# How does NC Rank in the Atlantic?



Department of Environmental Quality

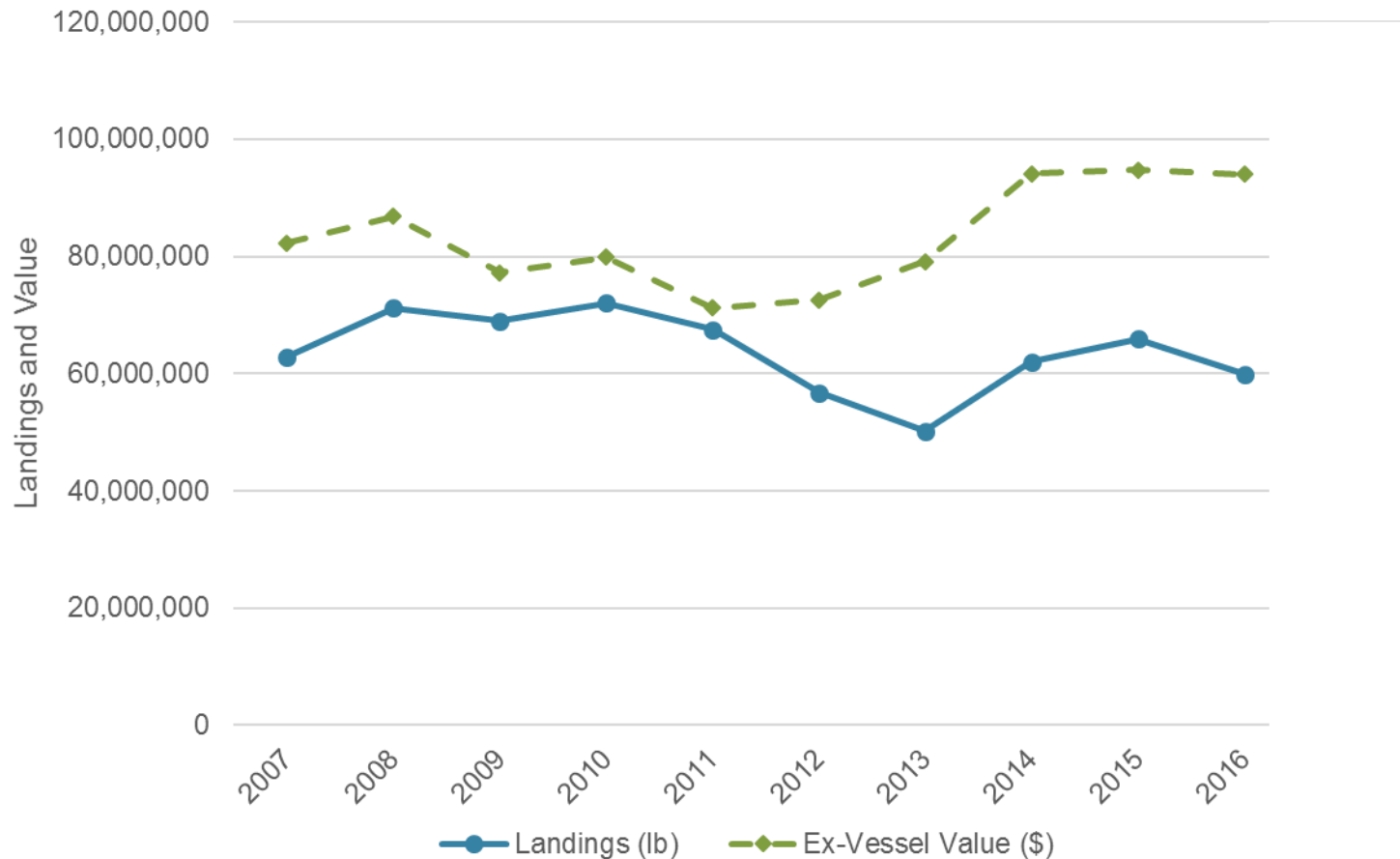


# *Fishing Trips*

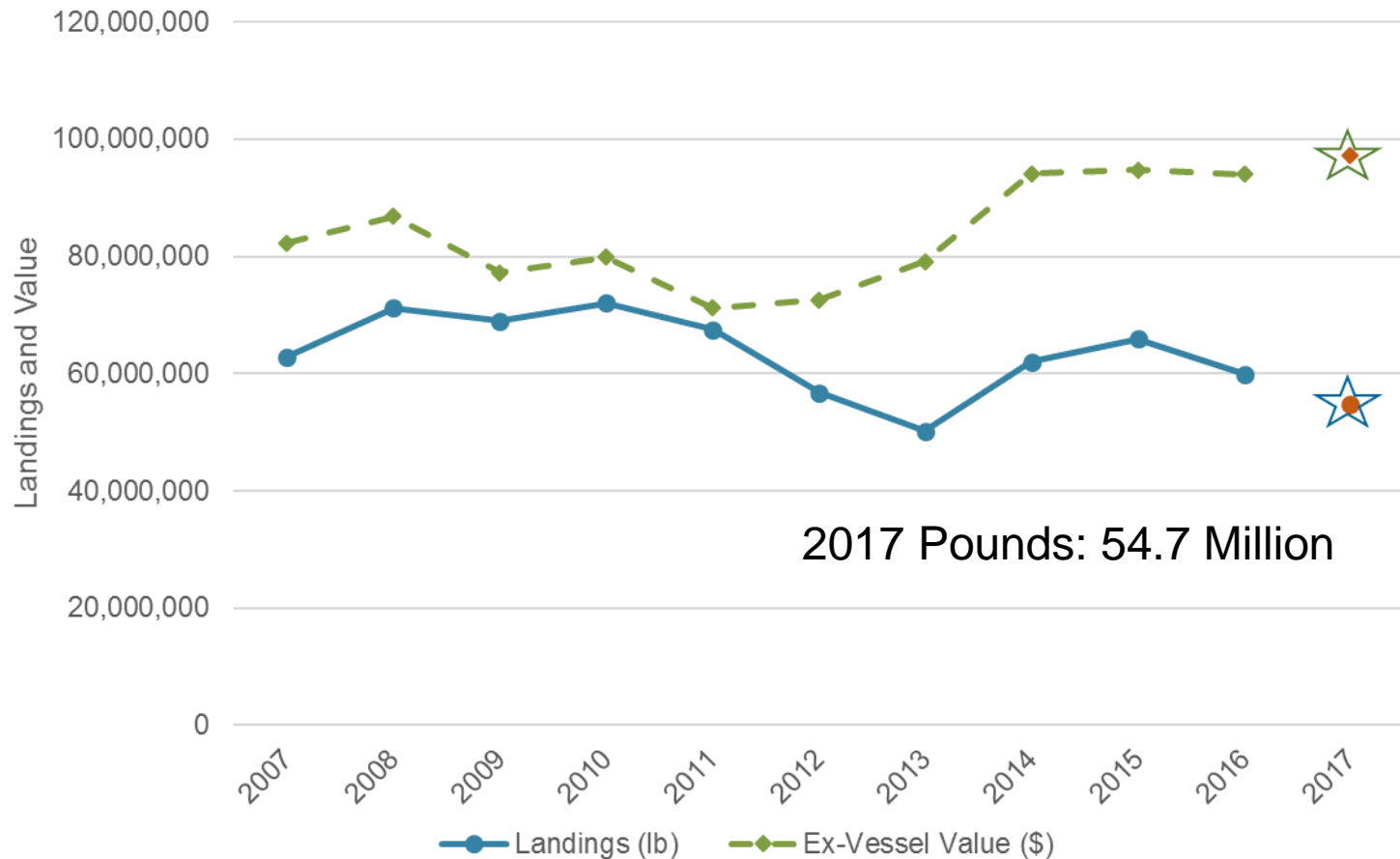




# *North Carolina Commercial Landings (pounds and value)*



# North Carolina Commercial Landings (pounds and value)



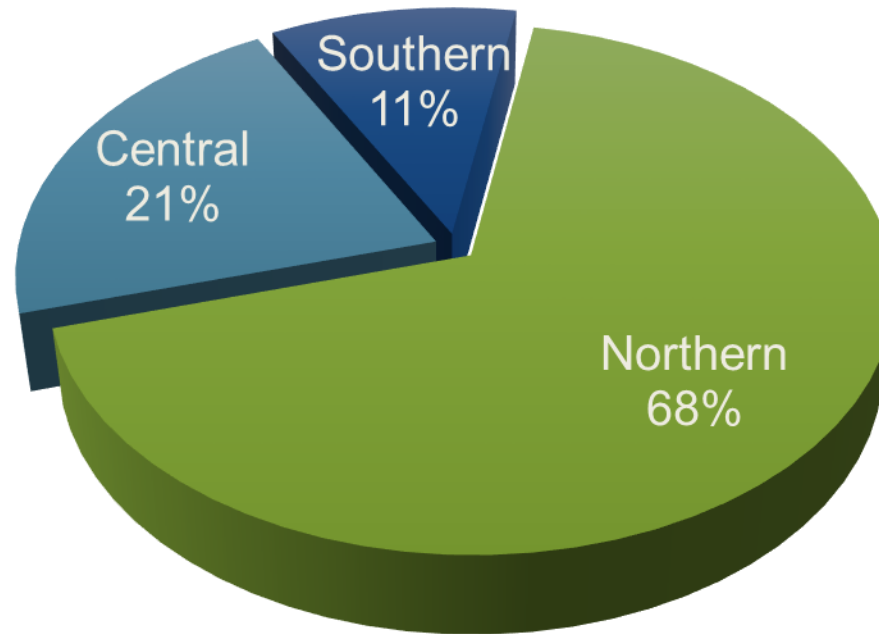
2017 Data are Preliminary



# *North Carolina Commercial Landings (pounds - 2016)*



# *NC Commercial Landings (by District - 2016)*



## Northern

Blue Crab  
Dogfish  
A. Croaker  
Tuna  
Catfishes  
Bluefish  
Sharks  
S. Mackerel  
Dolphin  
W. Perch  
Swordfish

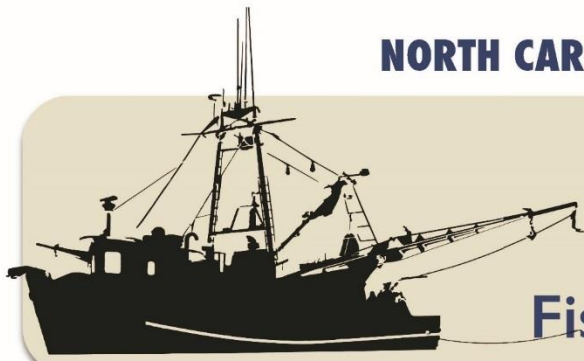
## Central

Flounder  
Swordfish

## Southern

Hard Clams  
Snappers  
Groupers  
Spot



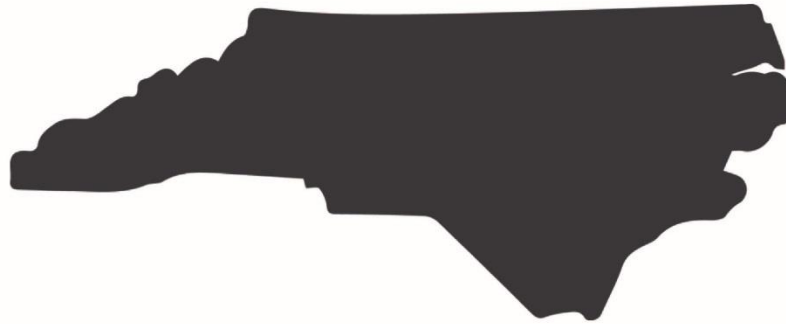


**2016 Total  
Commercial  
Fisheries Landings**

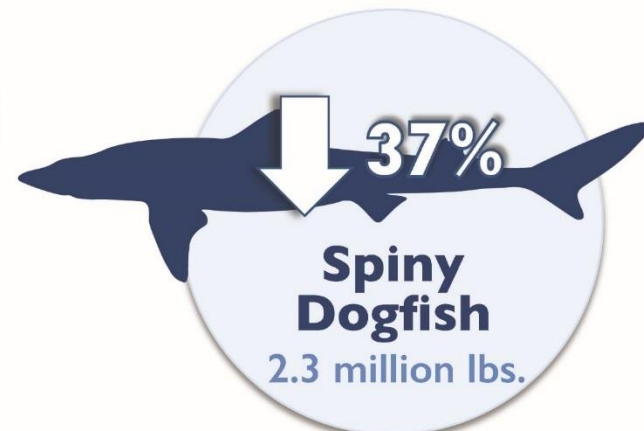
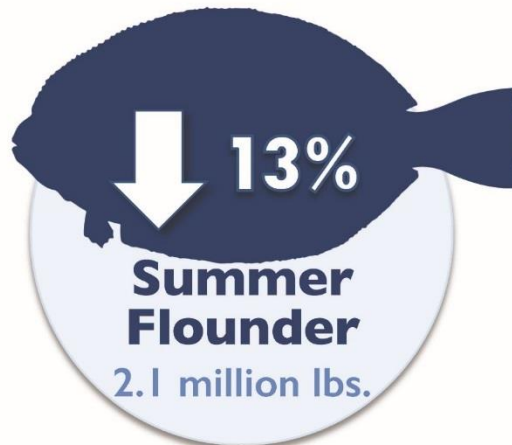
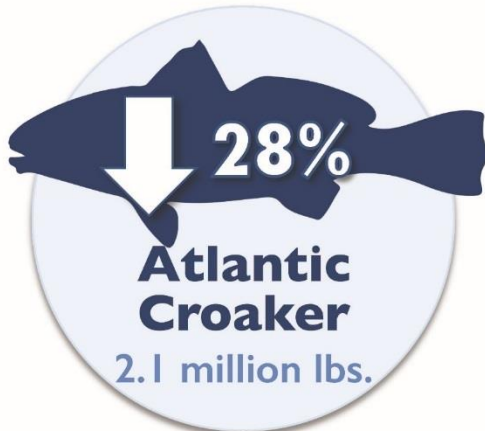
**59.9 million lbs.**

-1% from 5-year average\*

**INCREASES**



**DECREASES**

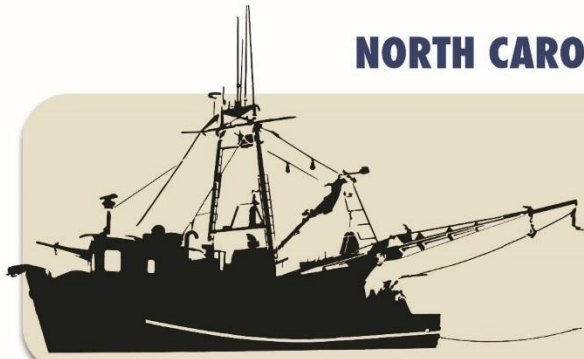


*\*Percentage changes based on averages from 2011 to 2015. Created by N.C. Division of Marine Fisheries and NC Sea Grant.*



## NORTH CAROLINA COMMERCIAL FISHERIES

## 2016 TOTAL VALUES

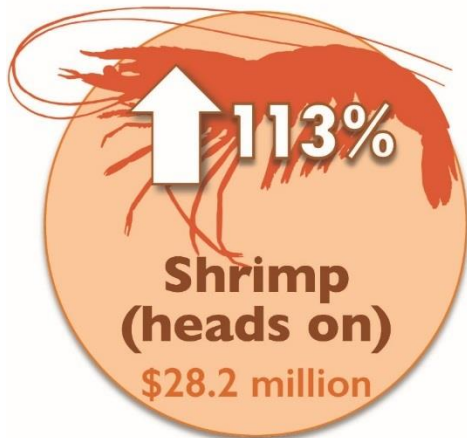


### 2016 Total Commercial Fisheries Values

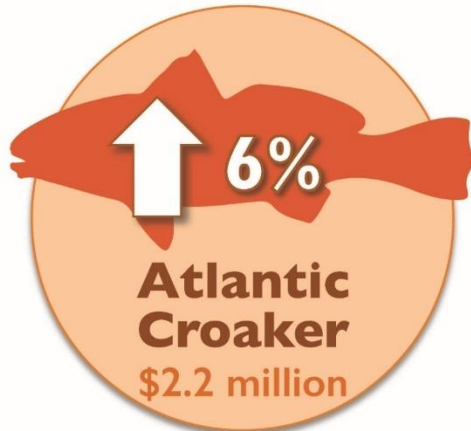
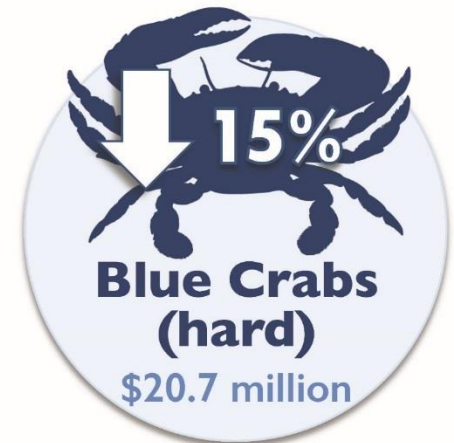
# \$94 million

+13% from 5-year average\*

#### INCREASES



#### DECREASES



\*Percentage changes based on average of values from 2011 to 2015. Created by N.C. Division of Marine Fisheries and NC Sea Grant.

# *Landings vs. Stock Status*

Landings are only one part of determining species stock status

Other information needed include fishery independent data:

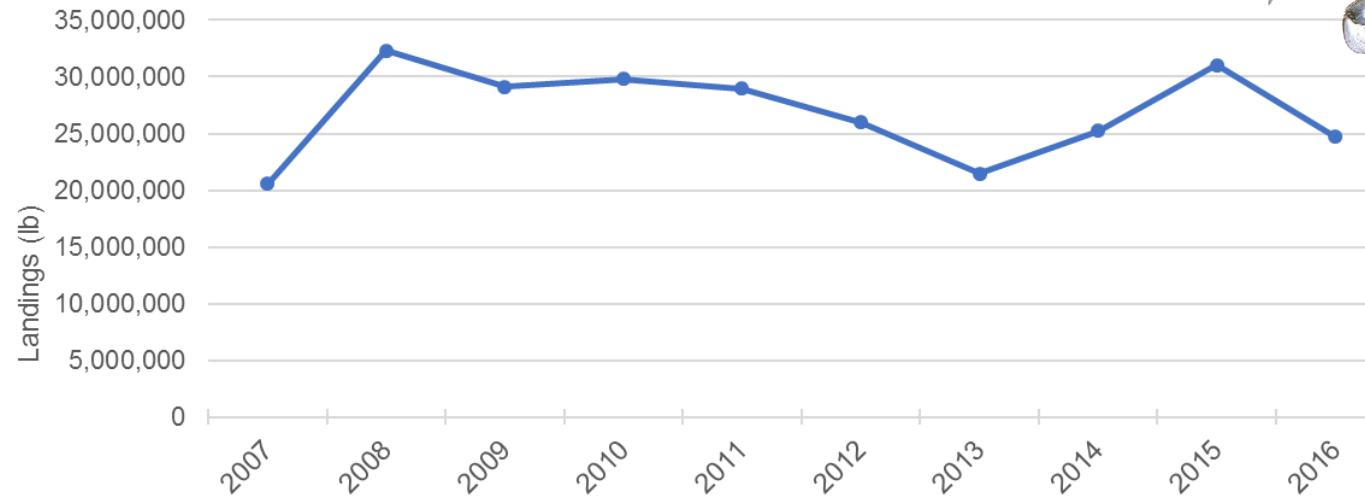
- Life history information (e.g., age structure, maturity, etc.)
- Recruitment
- Stock abundance

Landings data are influenced by a variety of factors:

- Market demand
- Price
- Fishing effort (i.e., number of trips taken)
- Weather
- Regulations
- Stock abundance



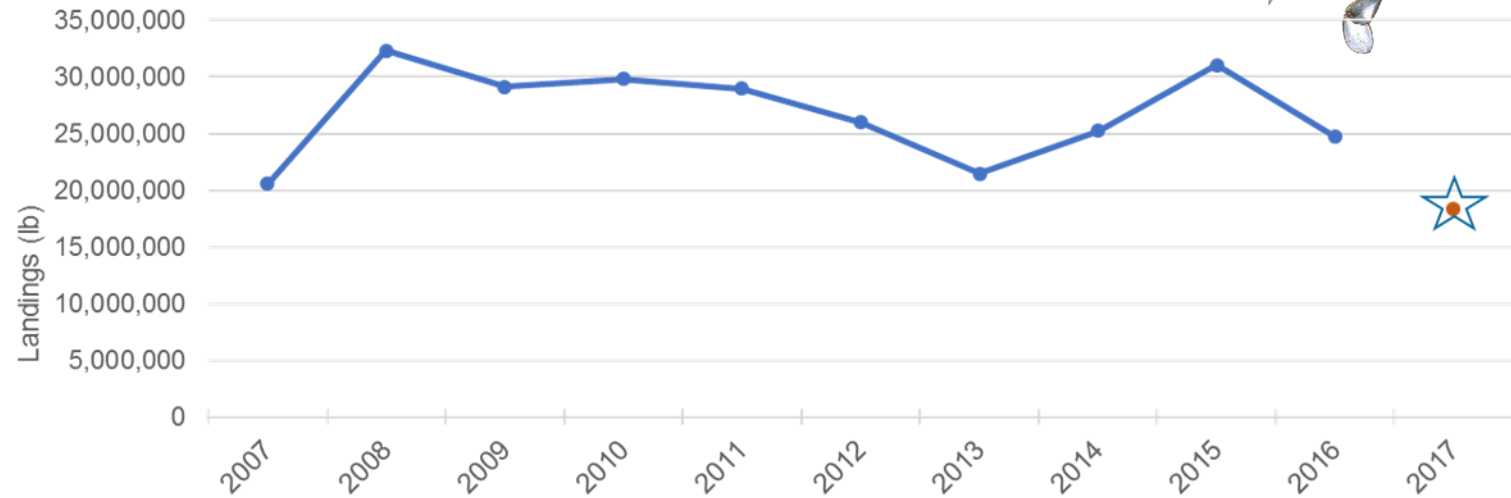
# *Hard Blue Crab*



- Landings fairly stable over the last 10 years
- 2016 decline likely due to:
  - Less effort in the fishery (10.6% less trips than 2015)
  - Hurricane Matthew in September
  - Black coloring reported in some crabs that affected marketing



# Hard Blue Crab



2016 Pounds: **24.7 Million**

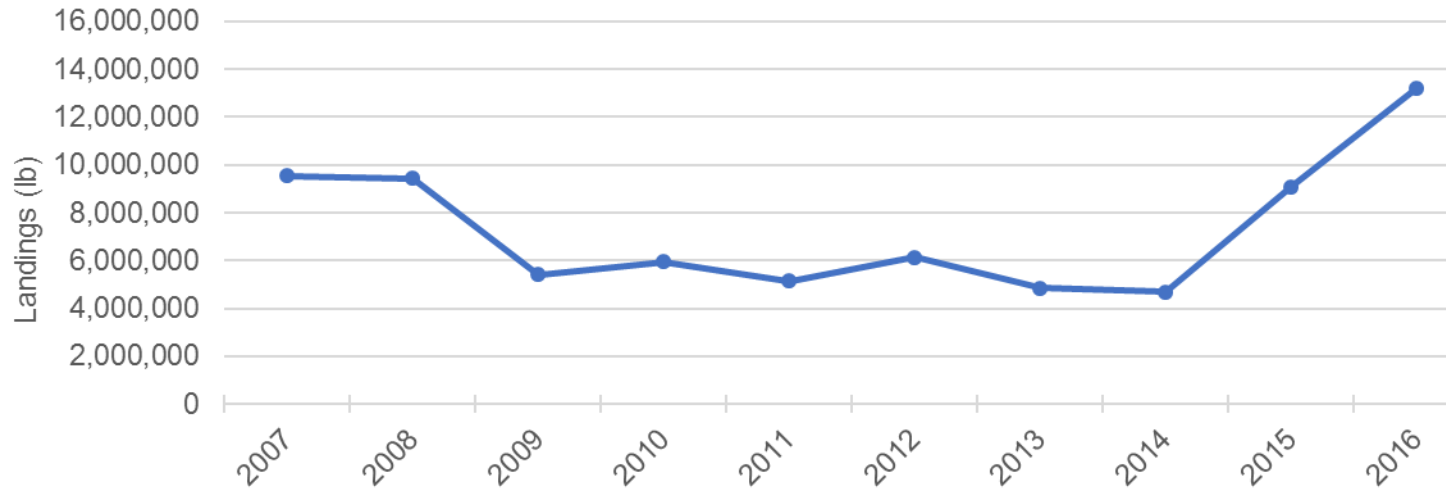
2017 Pounds: **18.3 Million**

**-26%**

2017 Data are Preliminary



# *Penaeid Shrimp*

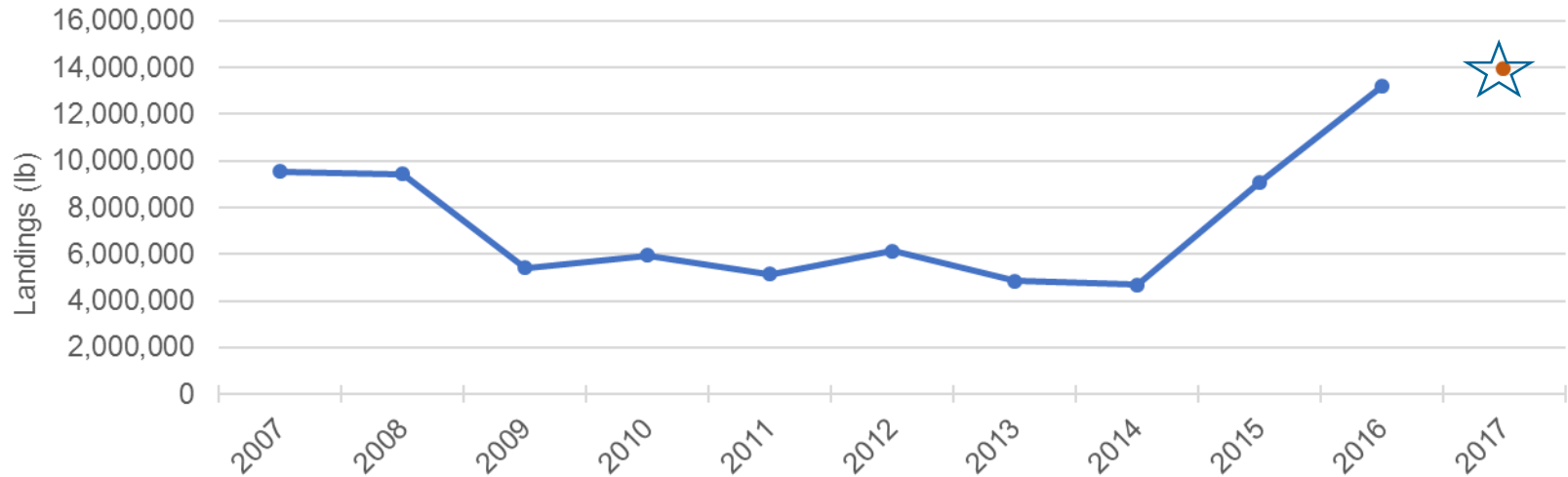


- Include brown, pink, and white shrimp
- Landings in 2016 were highest on record for NC since 1953
- Managed as an “annual crop”
- Availability to fishermen is driven by environmental factors
- Increased availability in ocean North of Cape Hatteras in 2016





# *Penaeid Shrimp*



2016 Pounds: **13.2 Million**

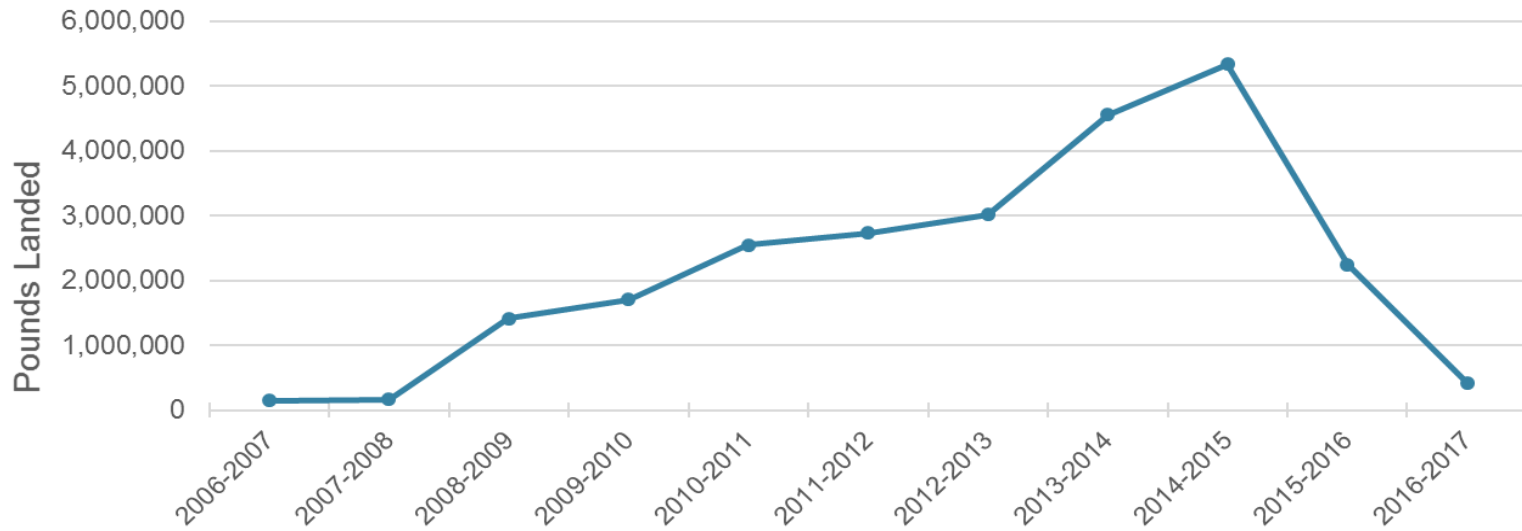
2017 Pounds: **13.9 Million**

**+6%**

2017 Data are Preliminary



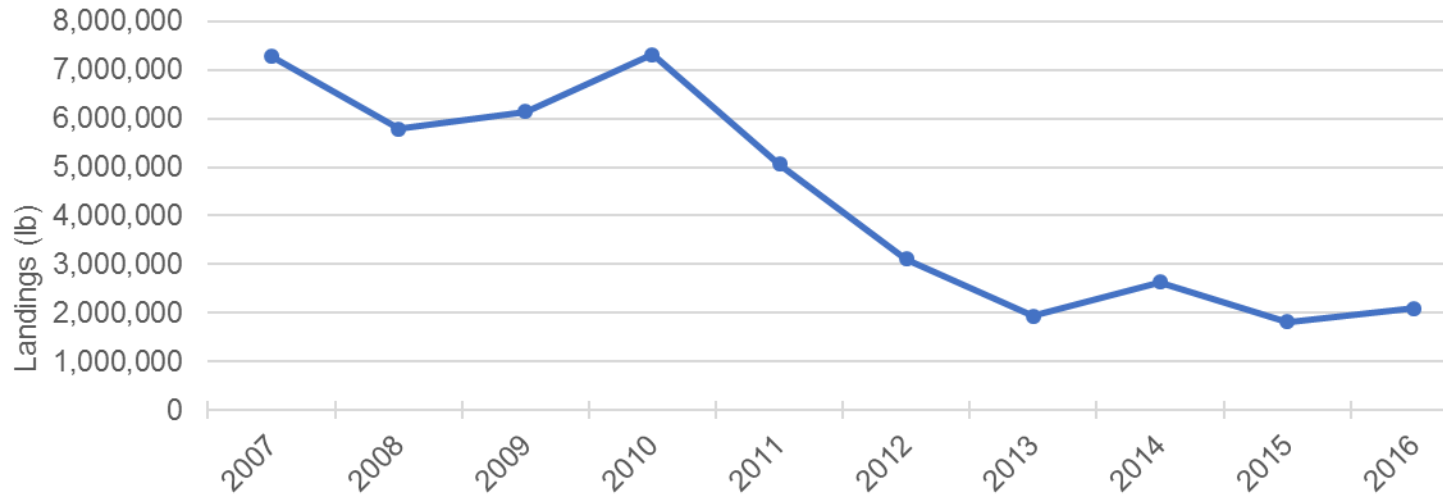
# Spiny Dogfish



- Landings have declined in past couple of years
- Managed under a quota
  - Landings are highly correlated with quota available
- Quota is based on fishing year (May through April)
- Reduced landings in recent years due to market prices and the availability of this species to fishermen



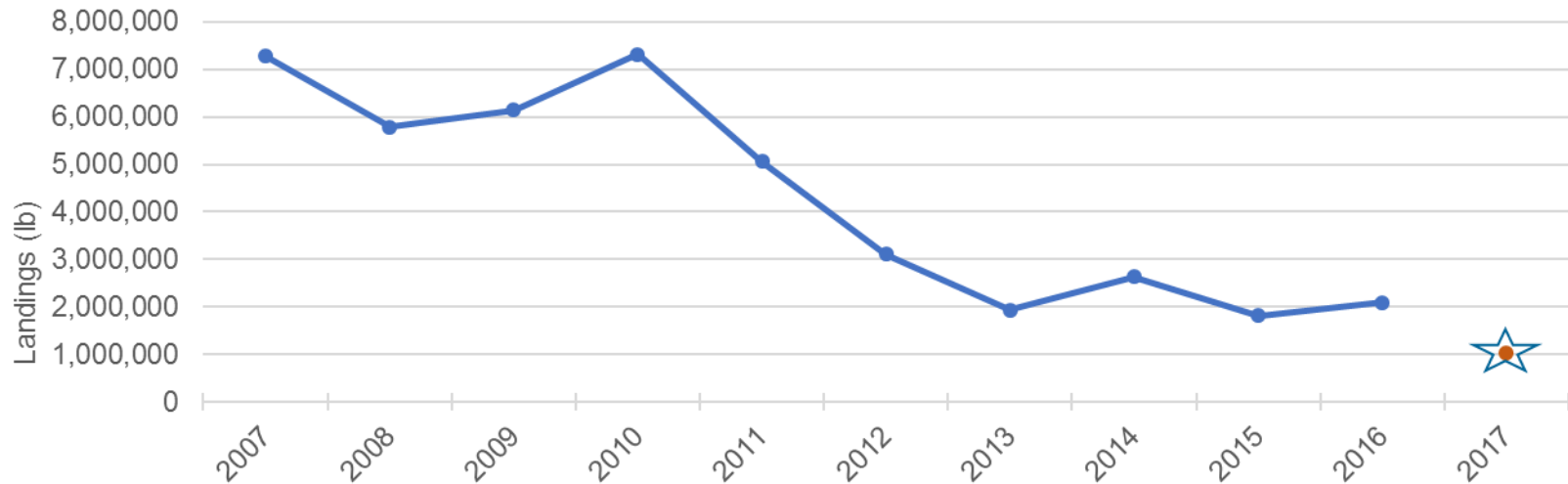
# *Atlantic Croaker*



- Landings have been fairly stable since 2013
- Managed by Atlantic States Marine Fisheries Commission (ASMFC)
  - Last stock assessment completed in 2017
  - Was not accepted for management
  - ASMFC found no need for a change in management or increased regulations at this time



# Atlantic Croaker



2016 Pounds: **2.1 Million**

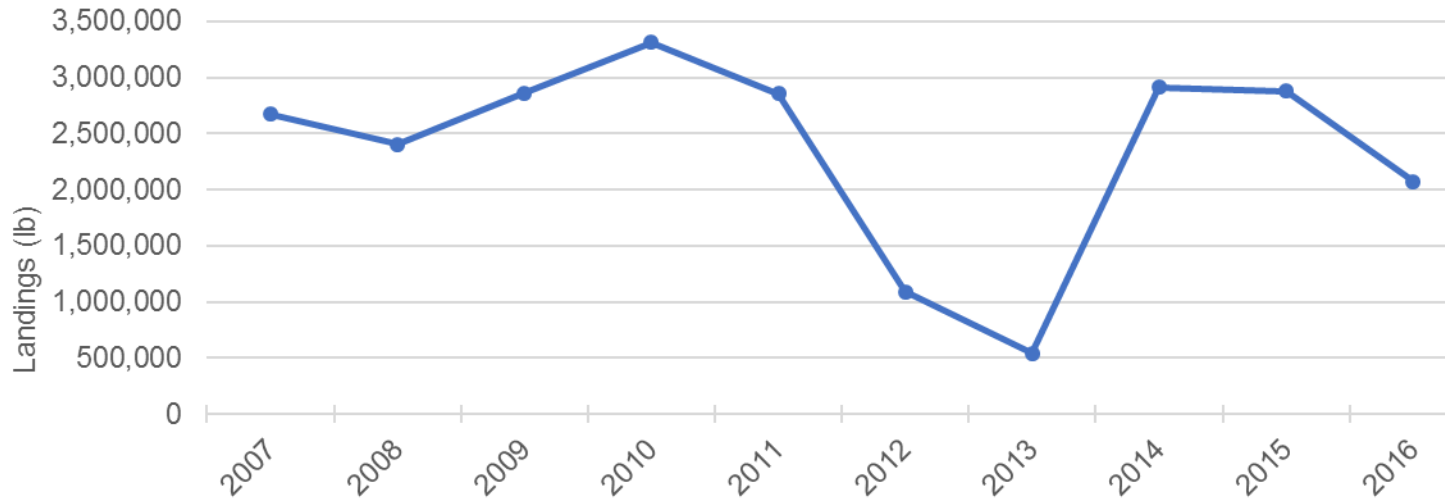
2017 Pounds: **1.0 Million**

**-52%**

2017 Data are Preliminary



# Summer Flounder

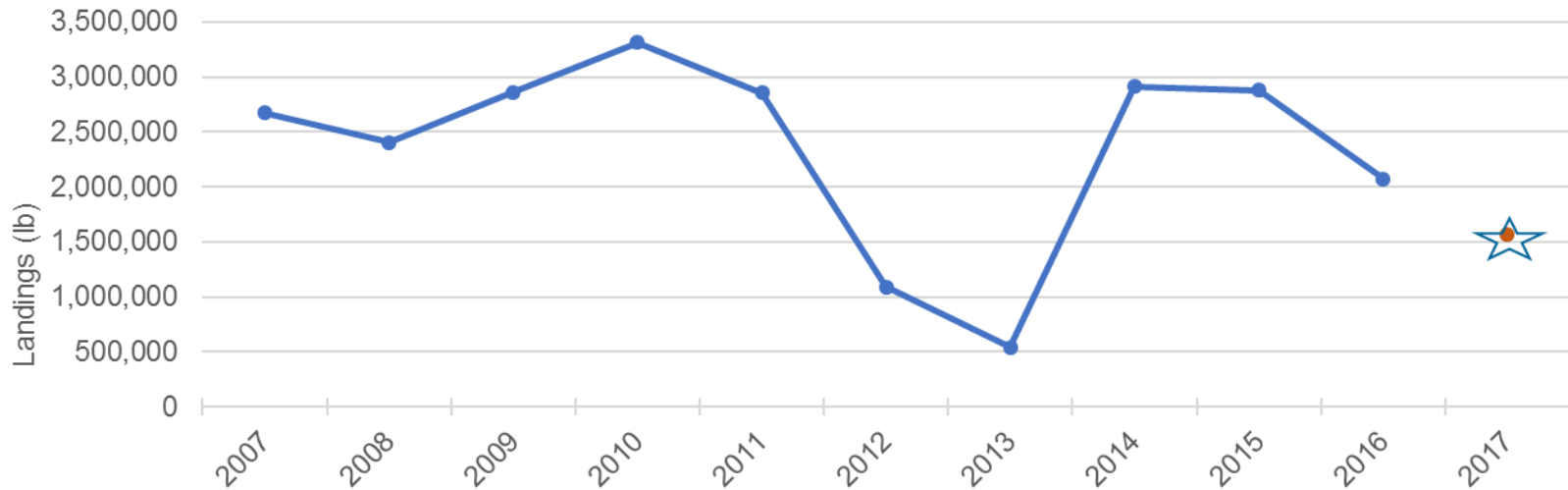
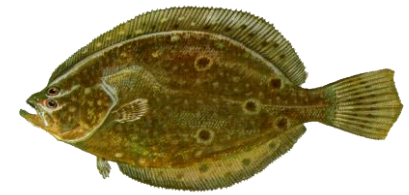


- Primarily trawl fishery in the ocean
- Managed under a quota
- Low landings in 2012 and 2013 due to issues with Oregon Inlet
  - Quota was transferred to other states during these years
- 2016 landings dropped by 28% from 2015
- Quota for 2016 dropped by 27%





# Summer Flounder



2016 Pounds: **2.1 Million**

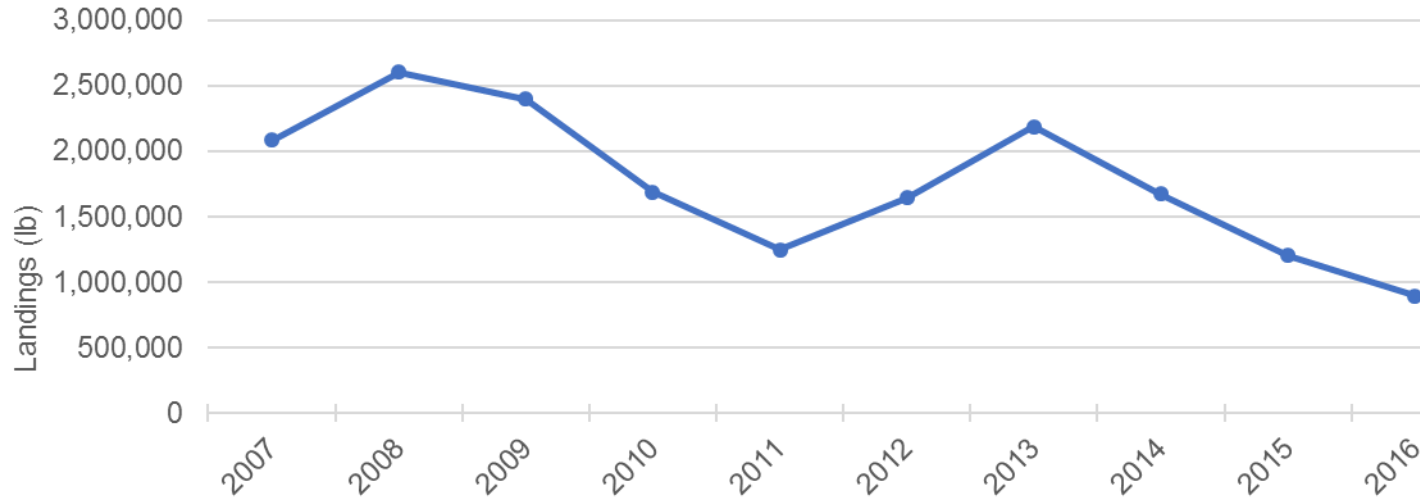
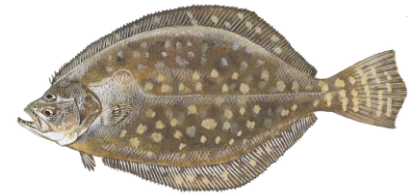
2017 Pounds: **1.6 Million**

**-25%**

2017 Data are Preliminary



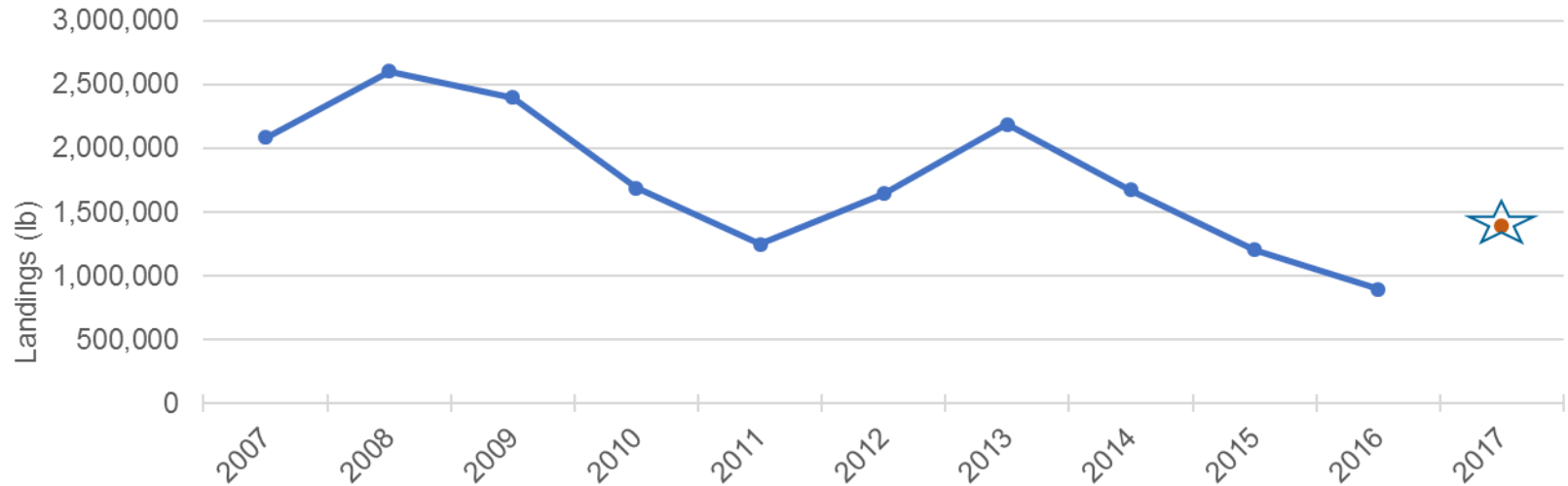
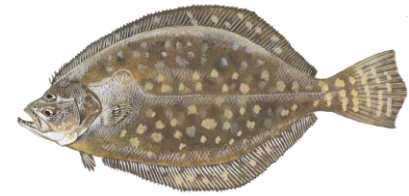
# *Southern Flounder*



- Primary commercial gears used:
  - Gill net
  - Pound net
  - Gig
- Landings have been declining due to increased restrictions on gill nets to reduce protected species interactions
- Due to gill net restrictions, since 2014, pound nets have had the highest harvest



# Southern Flounder



2016 Pounds: **897,765**

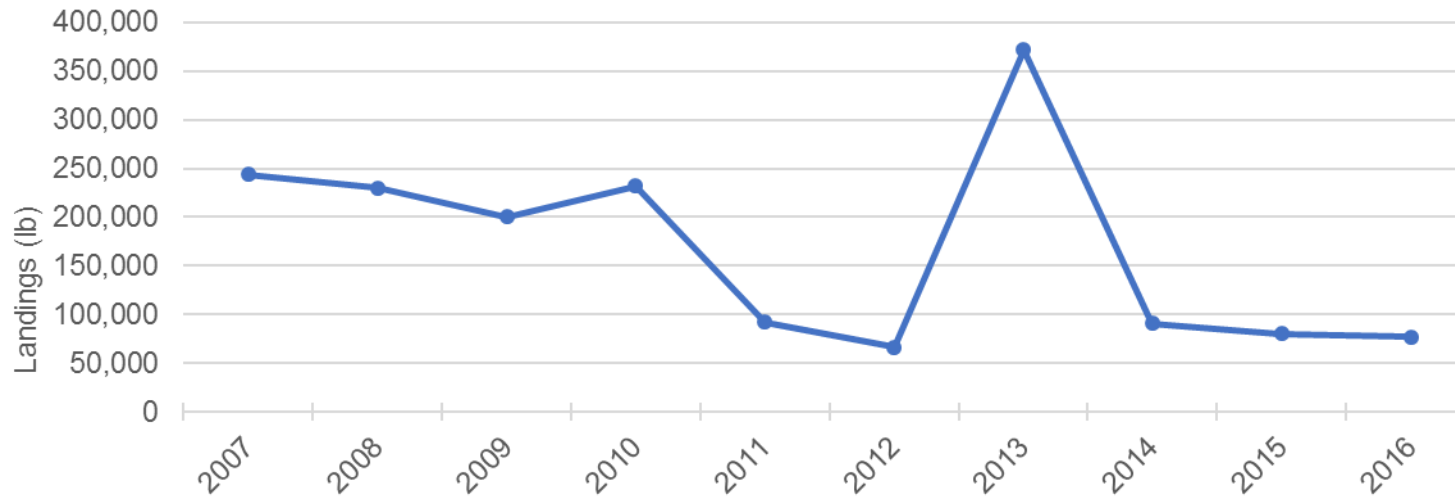
2017 Pounds: **1.4 Million**

**+54%**

2017 Data are Preliminary



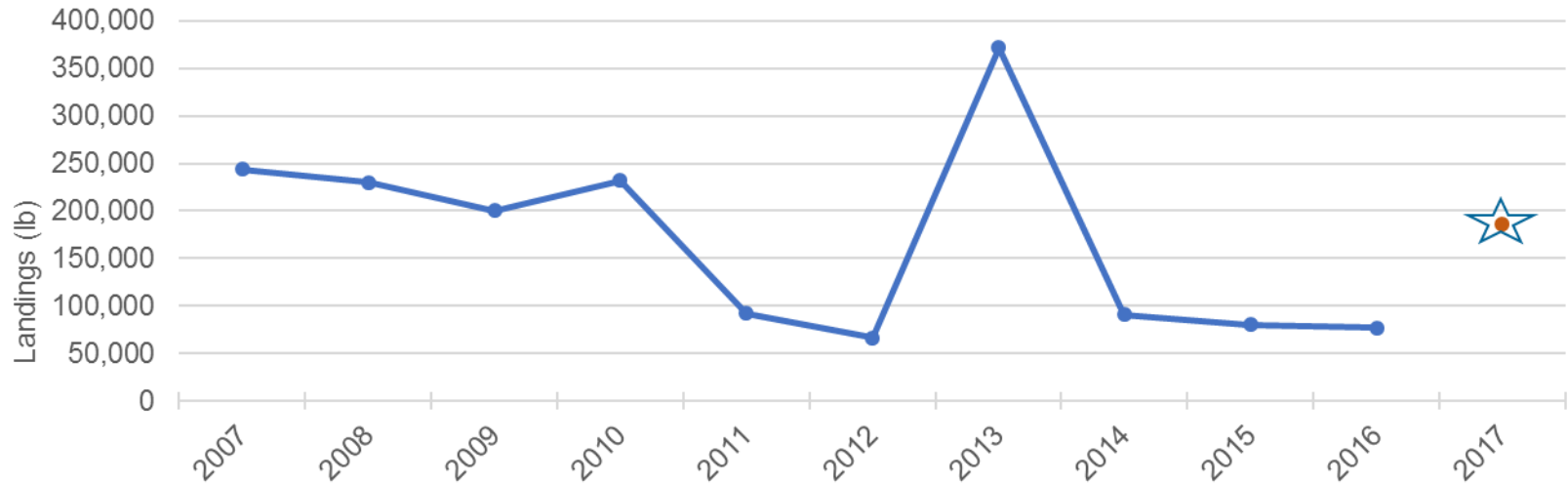
# Red Drum



- No directed fishery in NC (bycatch fishery)
- Gill nets are predominant gear
  - Since 2011, due to gill net restrictions, landings have been low
- 2013 landings peaked from:
  - Large year-class of fish the reached the slot limit that year
  - Increased use of strike nets and drop nets



# Red Drum



2016 Pounds: **77,017**

2017 Pounds: **185,429**

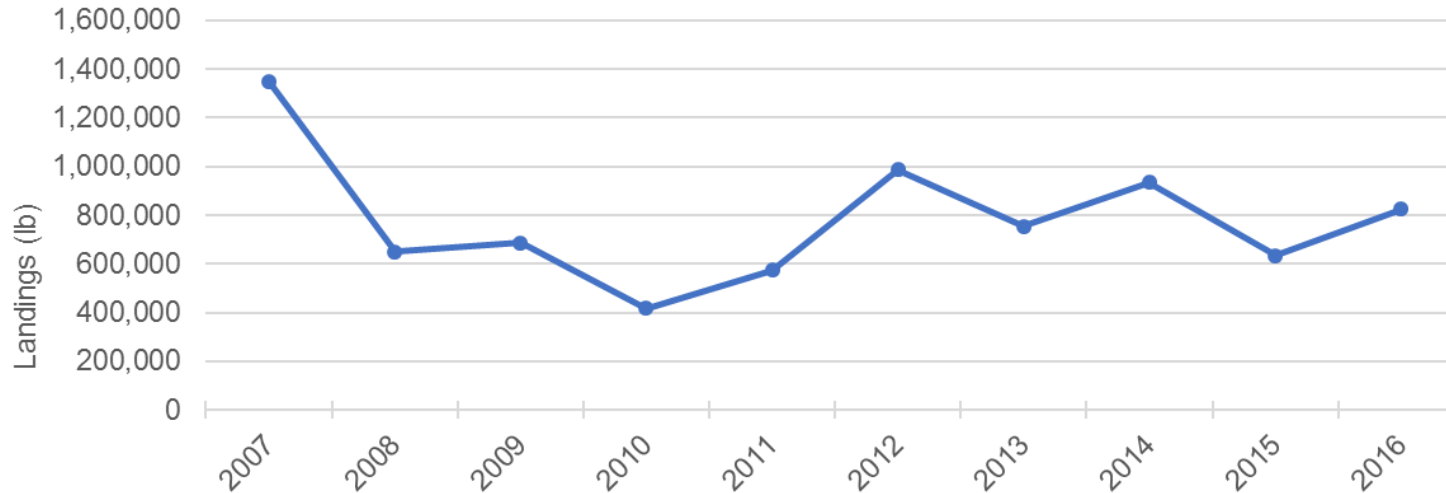
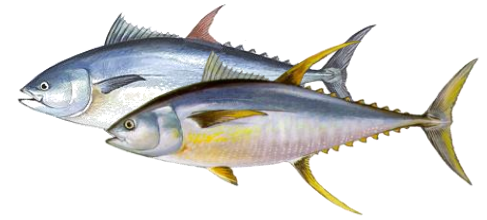
**+141%**

2017 Data are Preliminary





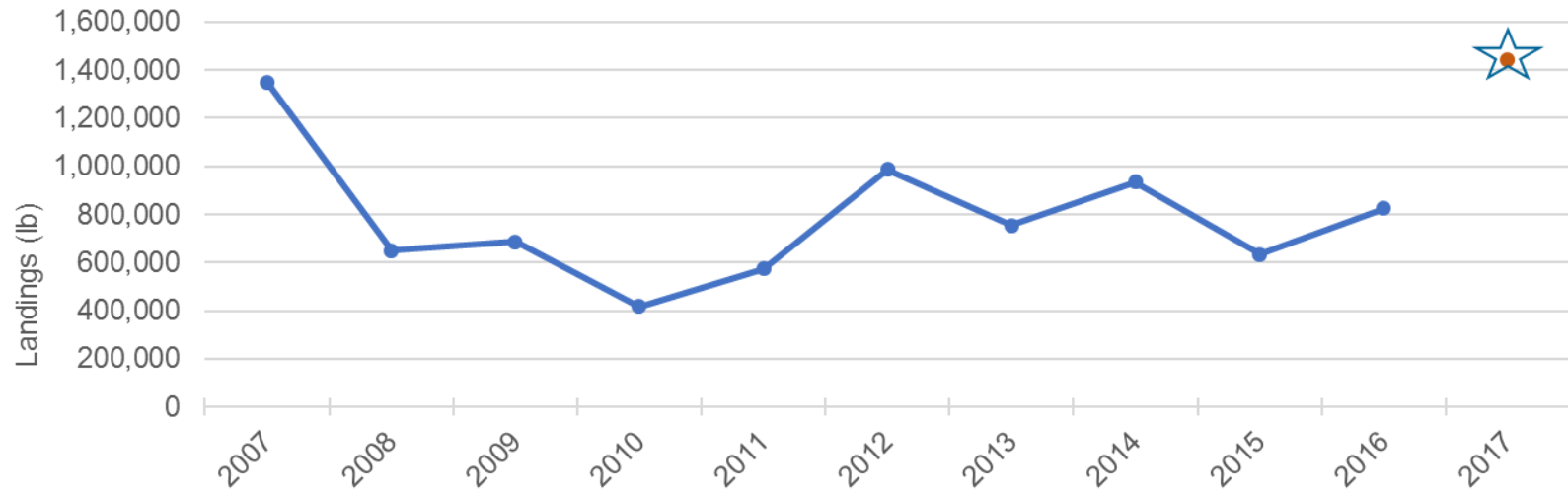
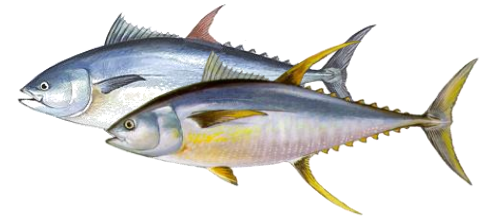
# *Yellowfin/Bluefin Tuna*



- Highly migratory species
- Managed by National Marine Fisheries Service
- Due to migratory patterns, these species have complicated management requiring international cooperation
- ICCAT – International Commission for the Conservation of Atlantic Tunas



# Yellowfin/Bluefin Tuna



2016 Pounds: **824,558**

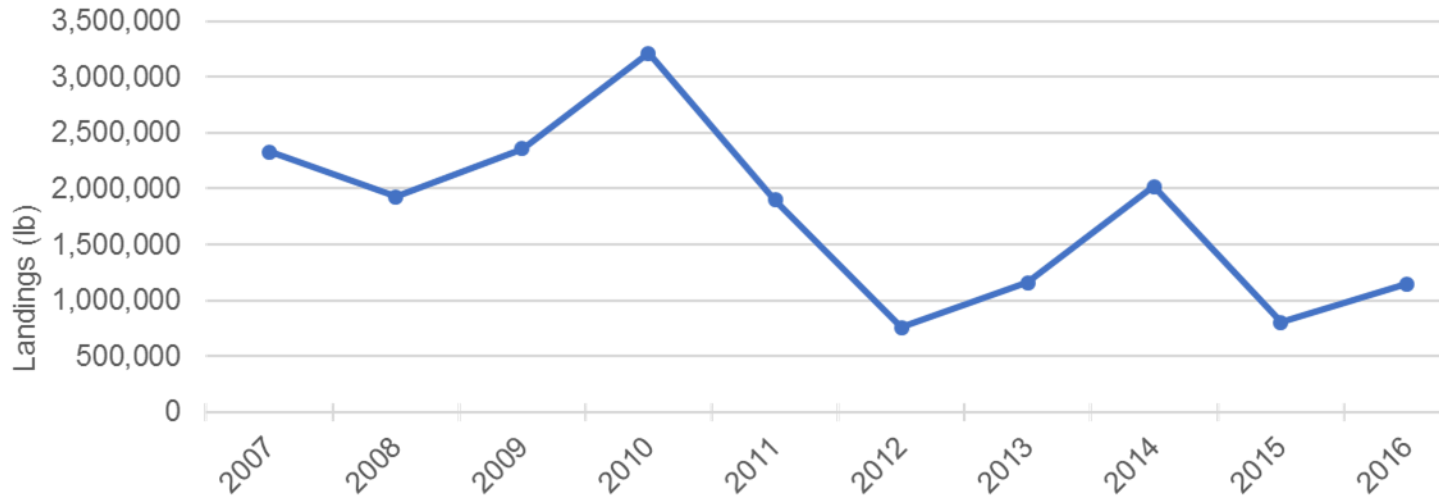
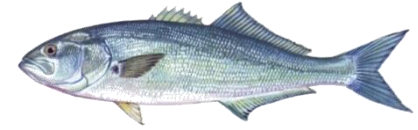
2017 Pounds: **1.4 Million**

**+75%**

2017 Data are Preliminary



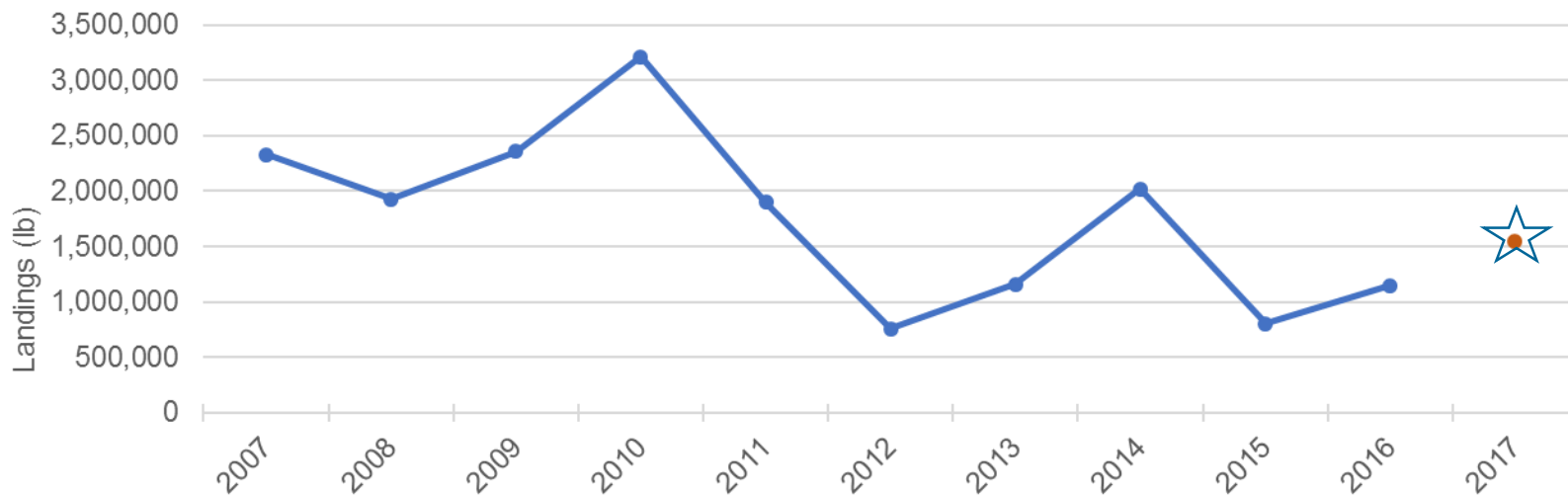
# Bluefish



- Ranked 6<sup>th</sup> in total pounds landed in NC for 2016
- Jointly managed by ASMFC and Mid-Atlantic Fishery Management Council
- Stock is considered to be rebuilt (no overfishing & not overfished)
- Commercial fishery is managed under a quota



# Bluefish



2016 Pounds: **1.1 Million**

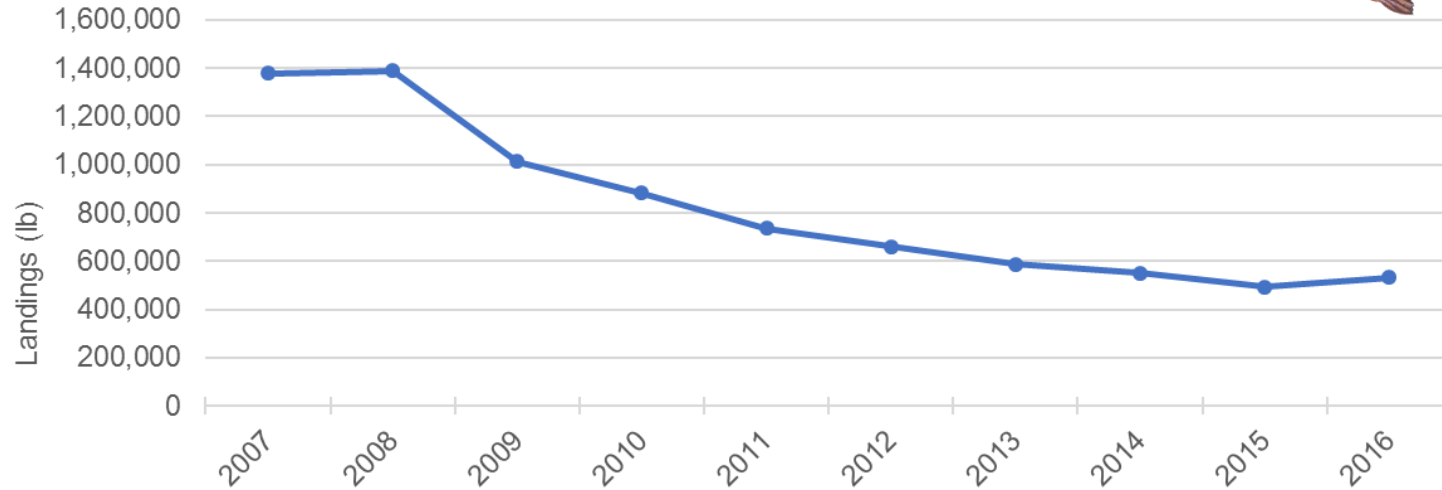
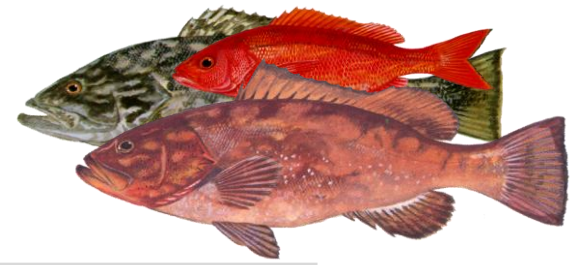
2017 Pounds: **1.5 Million**

**+34%**

2017 Data are Preliminary



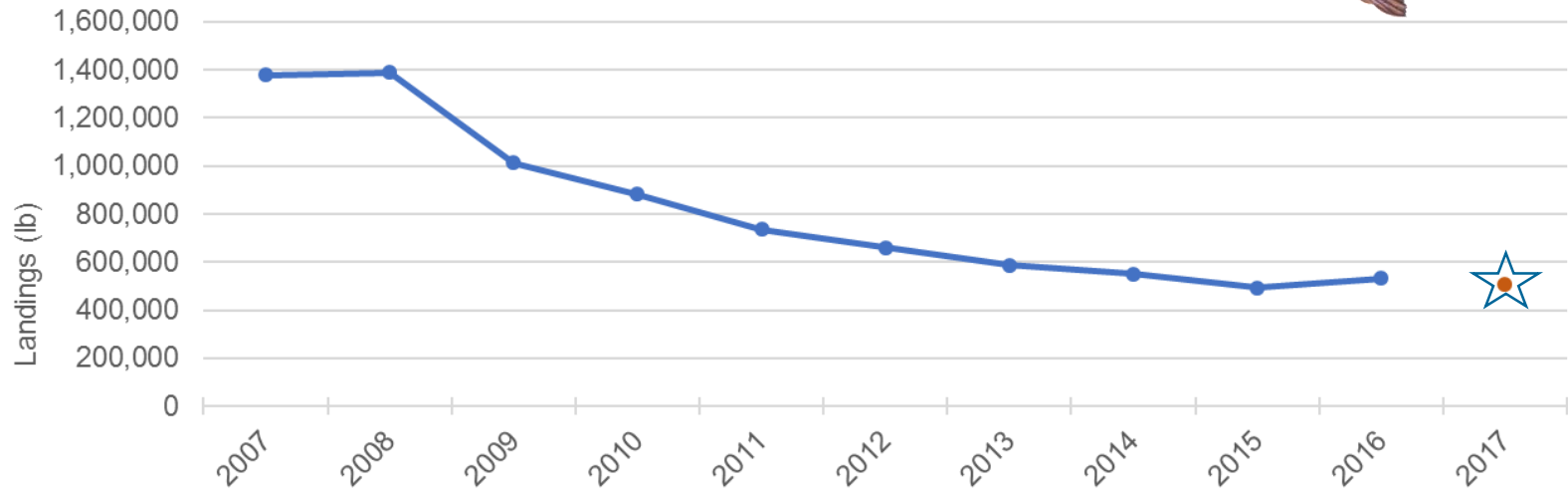
# Snapper/Grouper



- 55 species in Snapper/Grouper Complex
- Managed by the South Atlantic Fishery Management Council
- Managed as a complex: variety of species living in the same habitat and are typically fished for together
- Landings have been declining as regulations increase to protect these species
  - Many are slow growing, late maturing, and long lived



# Snapper/Grouper



2016 Pounds: **533,155**

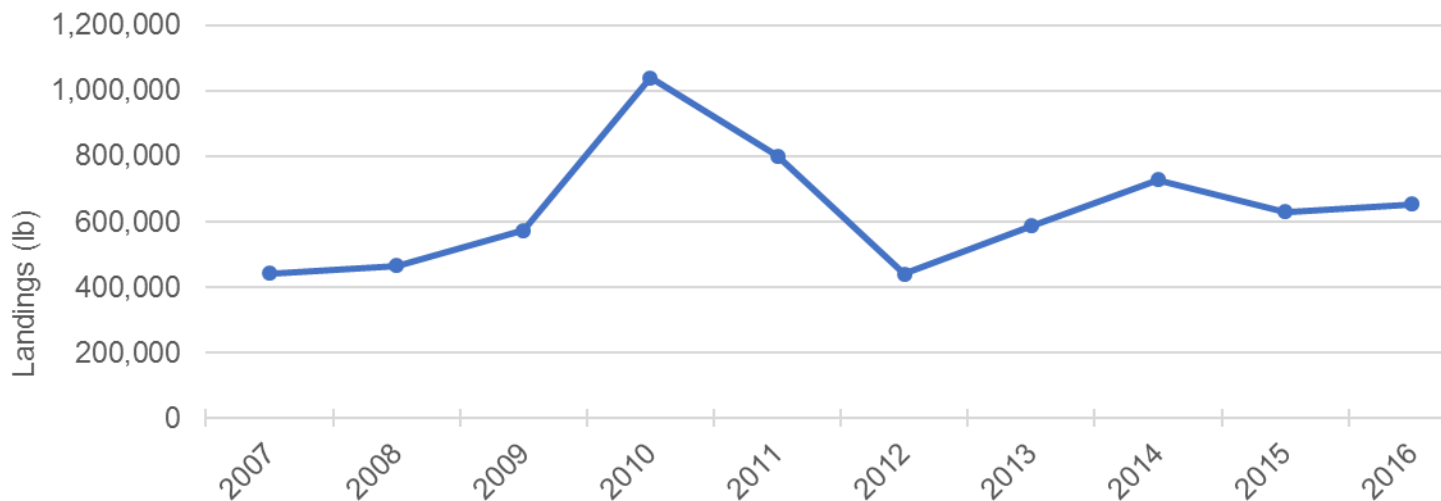
2017 Pounds: **506,320**

**-5%**

2017 Data are Preliminary



# Oysters

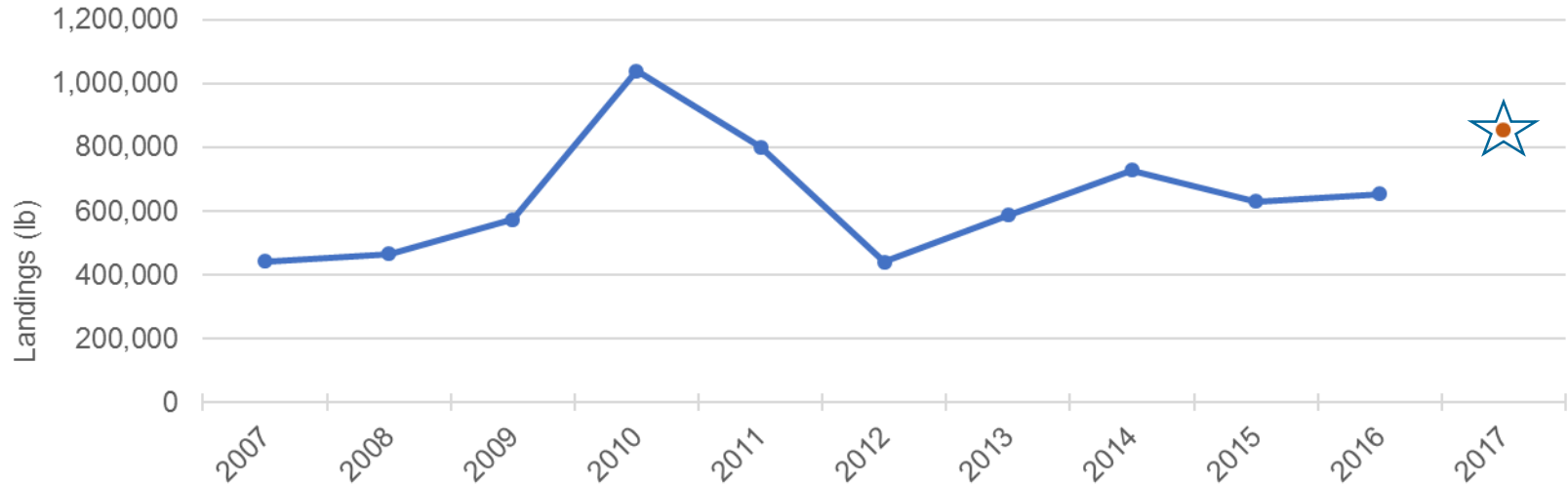


- Landings fluctuate over time based on:
  - Market demand
  - Abundance of marketable product
  - Improved harvesting methods
  - Increases in polluted shellfish area closures
- Increased landings in 2010/2011 due to high abundance in Pamlico Sound.
- Had not seen these levels of abundance in > 20 years





# Oysters



2016 Pounds: **653,889**

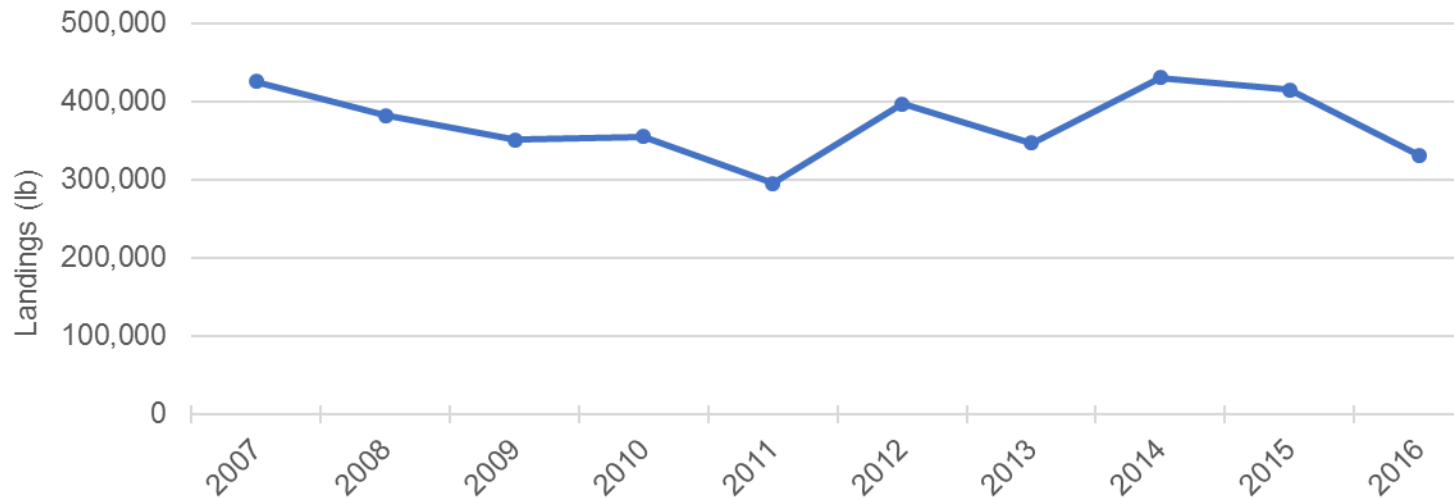
2017 Pounds: **854,134**

**+31%**

2017 Data are Preliminary



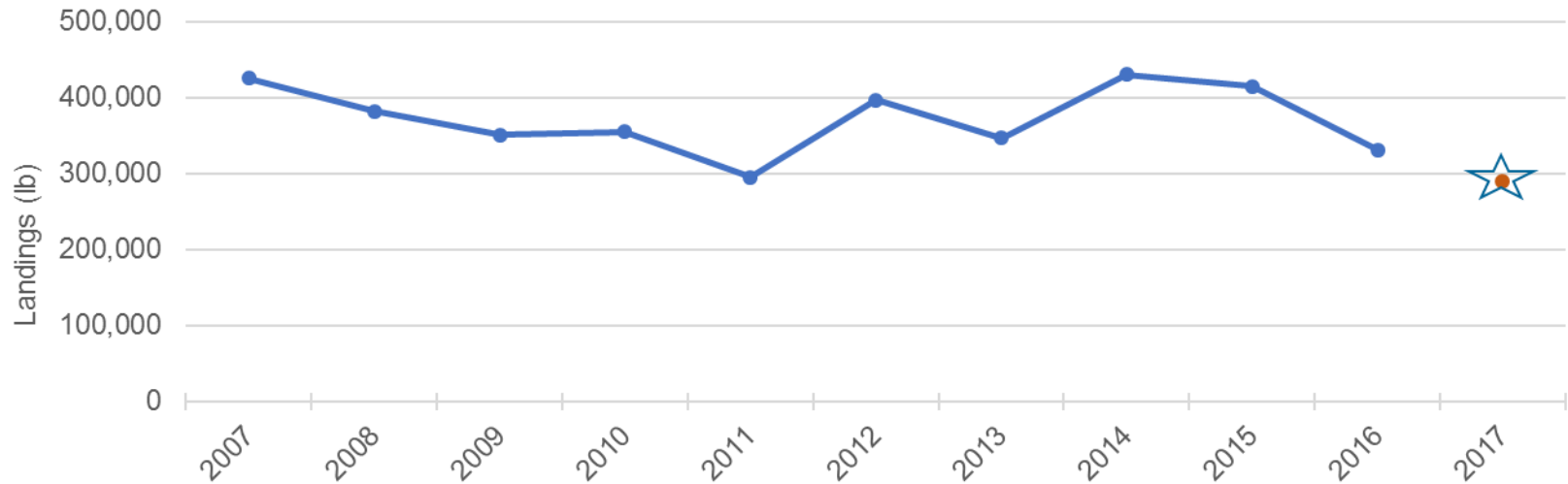
# Hard Clams



- Similar to oysters, clam landings respond to market demand, abundance, polluted area closures, and improved harvesting techniques.
- Landings in 2011 were the lowest on record in NC since 1975
- Current landings are at 1/4 of their peak in the 1980s



# Hard Clams



2016 Pounds: **331,215**

2017 Pounds: **289,615**

**-13%**

2017 Data are Preliminary



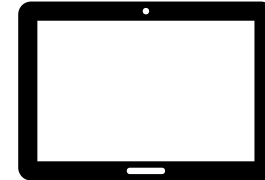
# *What does the future hold?*

License sales for FY2019 starts April 15<sup>th</sup>

- FY2019: July 1, 2018 – June 30, 2019

Web version of TT software

- Mobile app and tablet friendly



Trying to speed up our editing processes to get finalized data to managers faster



# *Custom Data Requests*

License and Statistics Section provides custom data upon request.

Data available include summarized landings by:

- Species
- Gear
- Waterbody or Area
- County or District

Also provide reports to Dealers and Fishermen showing their own trip tickets to ensure accuracy and for tax purposes.

If interested, contact: [Alan.Bianchi@ncdenr.gov](mailto:Alan.Bianchi@ncdenr.gov)  
[Grace.Kemp@ncdenr.gov](mailto:Grace.Kemp@ncdenr.gov)  
[Stephanie.McInerny@ncdenr.gov](mailto:Stephanie.McInerny@ncdenr.gov)

[www.ncmarinefisheries.net](http://www.ncmarinefisheries.net)



# Questions