

# SEDAR 64: Yellowtail Snapper Management and Assessment History in the southeastern U.S.

Shanae D. Allen and Christopher E. Swanson

FWRI Stock Assessment Group, St. Petersburg, FL

Review Workshop: February 24 – 26, 2020



# Yellowtail Snapper

- Tropical reef species associated with coral reef areas in the western Atlantic Ocean.
- Juveniles inhabit seagrass beds and mangroves before shifting to reefs.
  - Shifting widely observed throughout the Caribbean; scarcely observed in southern Florida and Florida Keys.
- Florida Keys
  - Core of the population and fishery in continental U.S. waters

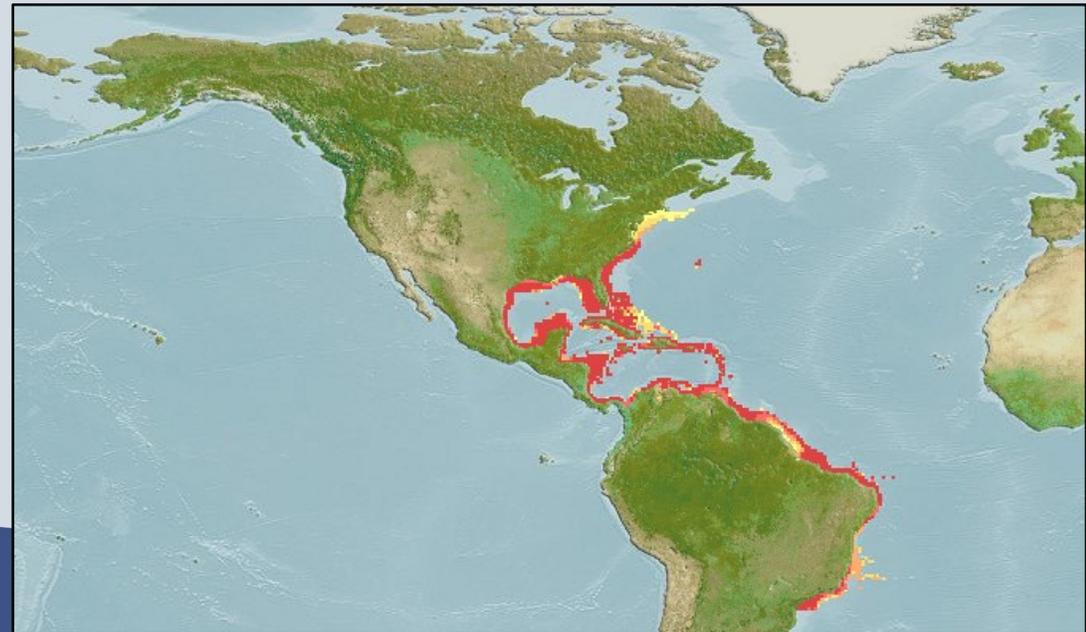
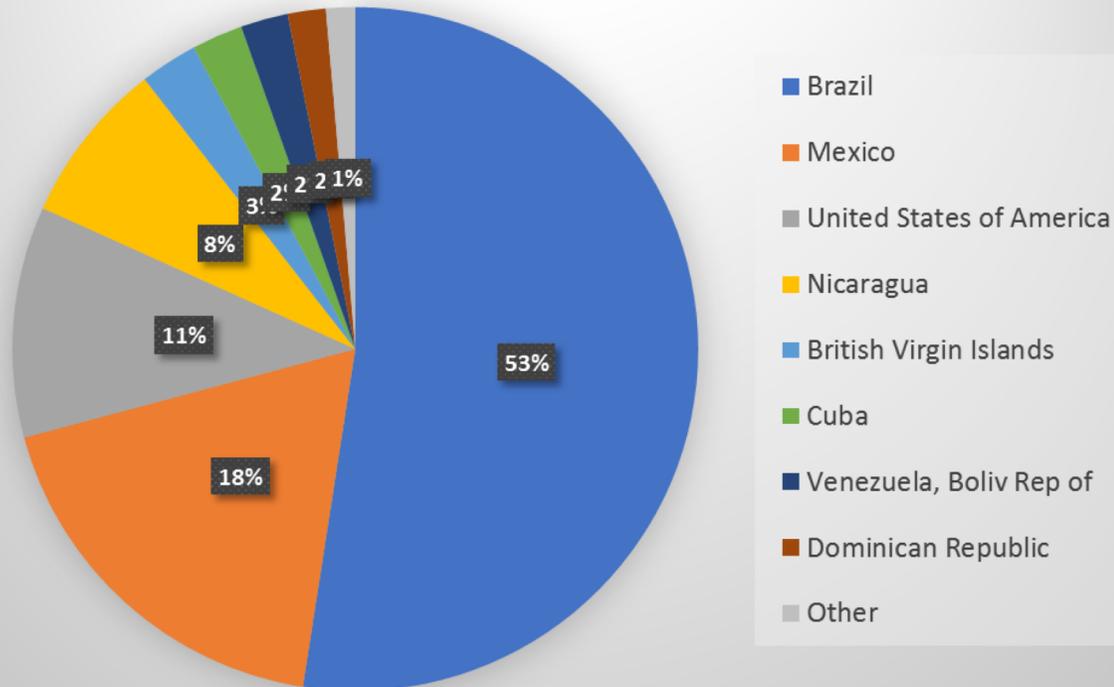


# Yellowtail Snapper

- Widely harvested commercially and recreationally in the U.S., Mexico, and Brazil (FAO)
  - Mostly hook and line gears in the U.S.



FAO Commercial Landings (mt) of Yellowtail Snapper 2017





**DREAM  
CATCHER**  
Charters



**JUNE 2018**

# FLORIDA SPORTSMAN

SINCE 1969

- SWORDFISH GEAR GUIDE
- CLASSIC SKIFF REBUILD
- FLY FISHING, DIVING, BASS FISHING, HUNTING

## CHUM AND GET 'EM

CURRENT ADVICE FOR DELICIOUS YELLOWTAIL

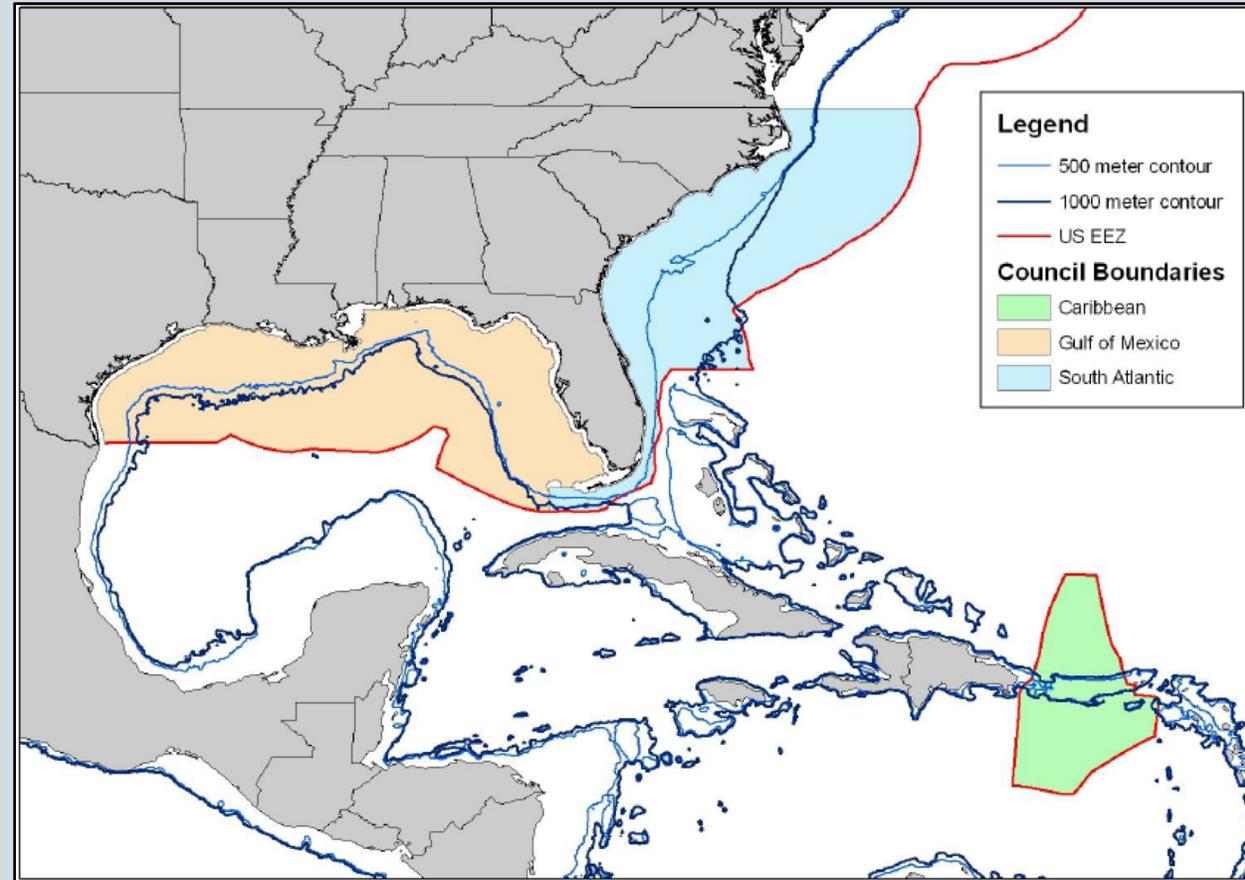
**KARL WICKSTROM TRIBUTE**  
STARTED A MAGAZINE, SPARKED A REVOLUTION: 50 YEARS OF ADVOCACY

**BEST NOW - TO WHERE TO - OFFSHORE & INSHORE**

06  
74470 71203  
www.FloridaSportsman.com \$4.99 U.S.

# Management History in the U.S.

- Managed as separate stock units by two councils (SAFMC, GMFMC)
  - Boundary is U.S. Highway 1 in the Florida Keys west to the Dry Tortugas
  - State of Florida also manages in state waters
- SEDAR assessments have treated this species as a single stock for the Councils to determine apportionment



# SAFMC FMP Amendments

- Snapper-Grouper FMP (8/31/1983)
  - 12" (305mm) TL minimum size limit for commercial and recreational fisheries
    - Florida state waters regulation enacted 7/1/1985
- Amendment 4 (1/1/1992)
  - Aggregate daily bag limit of 10 snappers for recreational fishery
    - Florida state waters regulation enacted 12/1/1986
- Amendment 11B (12/2/1999)
  - MSY-proxy set as 30% static SPR; OY-proxy is 40% static SPR
- Regulatory Amendment 15 (9/12/13)
  - OY = ACL = ABC
- Regulatory Amendment 21 (11/6/2014)
  - Modified MSST to be 75% of the  $SSB_{MSY}$



# GMFMC FMP Amendments

- Reef Fish FMP (11/8/1984)
- Reef Fish Amendment 1 (2/21/1990)
  - 12” (305mm) TL minimum size limit for commercial and recreational fisheries
  - Aggregate daily bag limit of 10 snappers for recreational fishery
- Reference points are currently undefined but an amendment is currently under development
  - GMFMC currently defers to SAFMC



# Quota History

<b>Gulf</b>	<b>South Atlantic</b>
<p data-bbox="122 429 1161 482"><u>Commercial and Recreational Combined</u></p> <ul data-bbox="122 505 1044 689" style="list-style-type: none"><li data-bbox="122 505 282 554">• ACL<ul data-bbox="219 576 1044 689" style="list-style-type: none"><li data-bbox="219 576 1044 625">• 725,000 lbs (1/30/2012 - 9/2/2013)</li><li data-bbox="219 639 1044 689">• 901,125 lbs (9/3/2013 - present)</li></ul></li></ul>	<p data-bbox="1702 429 2015 482"><u>Commercial</u></p> <ul data-bbox="1294 505 2117 889" style="list-style-type: none"><li data-bbox="1294 505 2117 689">• ACL<ul data-bbox="1391 576 2117 689" style="list-style-type: none"><li data-bbox="1391 576 2117 625">1,142,589 lbs (4/2012 – 11/2012)</li><li data-bbox="1391 639 2117 689">1,596,510 lbs (11/2012 – present)</li></ul></li><li data-bbox="1294 711 2117 889">• Closures<ul data-bbox="1391 782 2117 889" style="list-style-type: none"><li data-bbox="1391 782 2117 831">10/31/2015 – 12/31/2015</li><li data-bbox="1391 845 2117 889">6/3/2017 – 8/1/2017</li></ul></li></ul> <p data-bbox="1702 915 2015 968"><u>Recreational</u></p> <ul data-bbox="1294 989 2117 1175" style="list-style-type: none"><li data-bbox="1294 989 2117 1175">• ACL<ul data-bbox="1391 1061 2117 1175" style="list-style-type: none"><li data-bbox="1391 1061 2117 1109">1,031,286 lbs (4/2012 – 9/2013)</li><li data-bbox="1391 1123 2117 1175">1,440,990 lbs (9/2013 – present)</li></ul></li></ul>



# Assessment History

## SEDAR 3 (2003)

- Unit stock: South Atlantic and Gulf of Mexico as a single unit
- Integrated and Statistical Catch-at-Age models applied to data from 1981 - 2001
- Combined Sex Models, Ages 0 – 15+
- Constant natural mortality (0.20)
- Spawning offset: July 15
- 3 Fleets, 3 Fishery-dependent indices, 1 Fishery-independent index
- Release mortality: 30%
- **The population was not overfished nor experiencing overfishing. The population was estimated at nearly two times the size that would produce the maximum sustainable yield.**

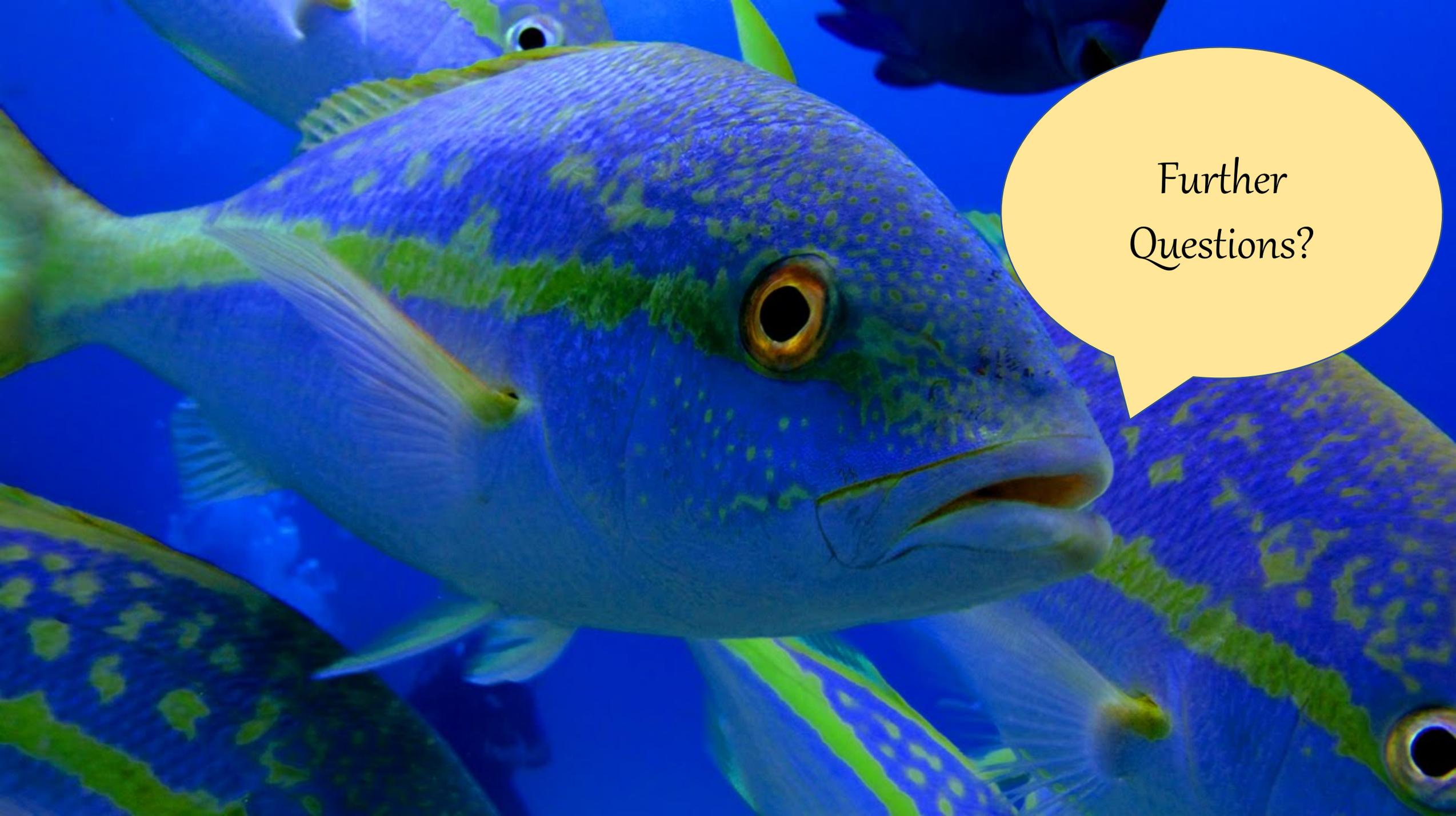


# Assessment History

## SEDAR 27A (2012)

- Unit stock: South Atlantic and Gulf of Mexico as a single unit
- Statistical catch-at-age model (ASAP2) applied to data from 1981 through 2010
- Combined Sex Model, Ages 1 – 12+
- Age-specific natural mortality based on maximum age of 23
- Spawning offset: July 1
- 3 Fleets, 3 Fishery-dependent indices, 1 Fishery-independent index
- Release mortality: 10% for Recreational, 11.5% for Commercial
- **The population was not overfished nor experiencing overfishing. The population was estimated at three times the size that would produce the maximum sustainable yield.**





Further  
Questions?