

## Update combined data Southeast Reef Fish Survey (SERFS)

- ► MARMAP (1972)
- ► SEAMAP-SA (2009)
- > SEFIS 2010



<u>Ma</u>rine <u>Resoruces Monitoring</u>, <u>Assessment & Prediction Program Southeast Area Monitoring & Assessment Program (South Atlantic) Southeast Fishery Independent Survey</u>



Gear: chevron trap (1990-2017)

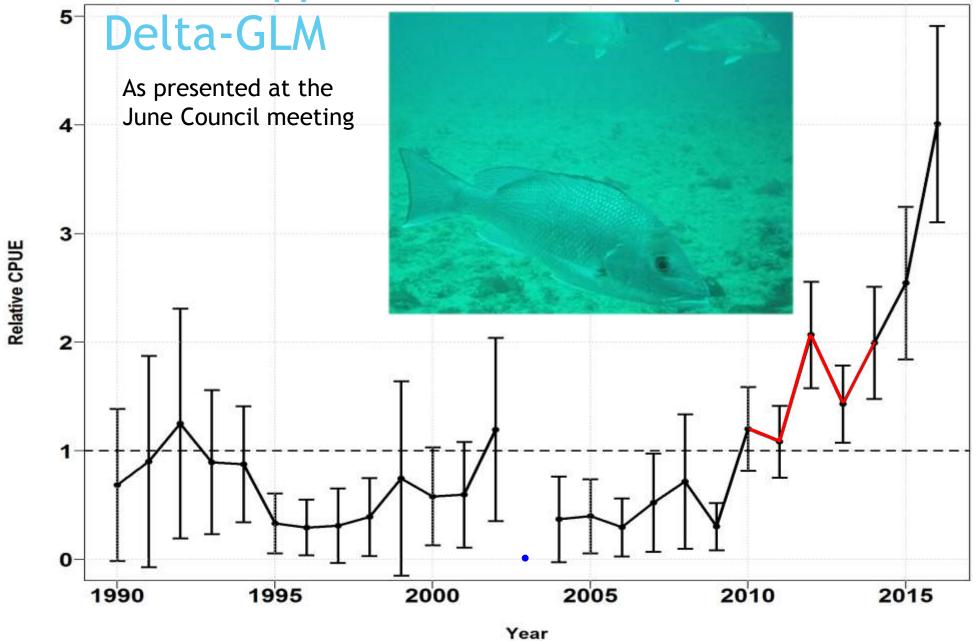
- ightharpoonup CPUE in  $\frac{Catch}{Trap}$ 
  - Standardized using Zero-Inflated Negative Binomial Method (ZINB)
  - ▶ Index normalized to long term average
  - ► Error bars are ± 95% CI

## Caveats

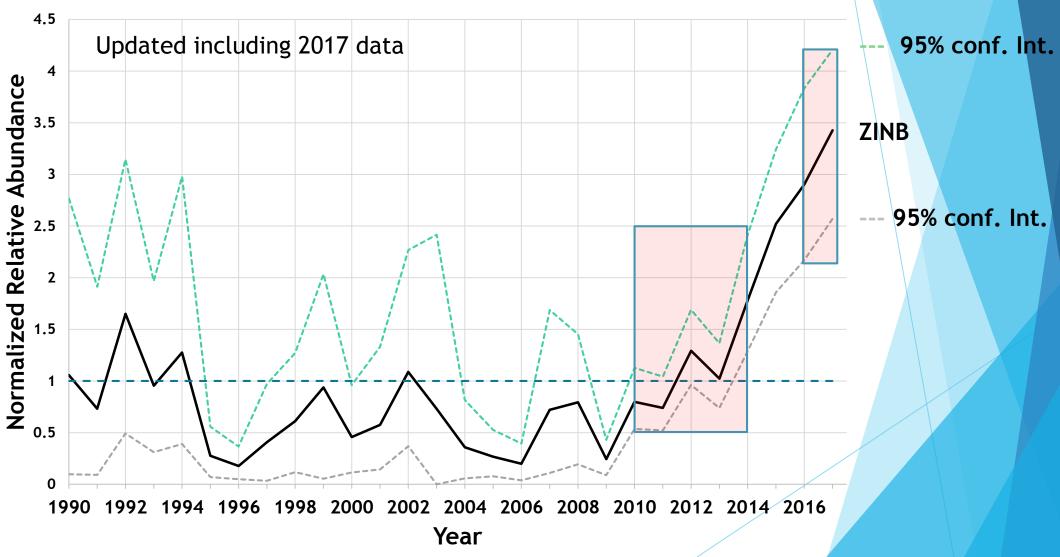
- Chevron trap catch data only (no video data)
- ► Not an update of stock status
- Constraints, stratification, units, and models for CPUE may be different from those used in (SEDAR) stock assessments
- Updated CPUE trend not discussed in assessment framework



Red Snapper - Chevron Trap
Delta-GLM



## Red Snapper Chevron Trap ZINB













## **Acknowledgements:**

Walter Bubley, Joseph Ballenger, Tracey Smart, Michelle Willis, Christina Schobernd, Nate Bacheler

MARMAP/SEAMAP-SA/SEFIS
Staff & Students
Research Vessel Crews

Past and present

