

An underwater photograph of a large, dark-colored fish, possibly a snapper or grouper, swimming towards the right. The fish is positioned in the center-right of the frame. To the left, a portion of a wire mesh trap is visible. The background is a clear, blue underwater environment with some sandy or rocky seabed visible at the bottom. The overall lighting is somewhat dim, typical of underwater photography.

# SEDAR 68 Index Working Group—Gulf of Mexico

Kevin Thompson, FWRI

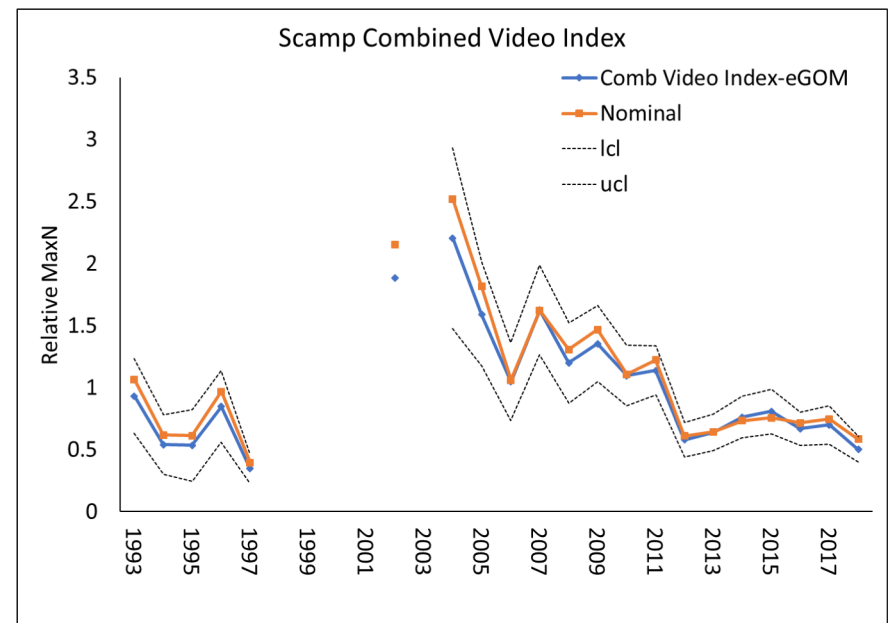
# Indices evaluated

- Fishery independent video indices
  - SEAMAP video
  - Combined labs eGOM video
  - Reef visual survey
- Fishery dependent
  - Recreational Headboat



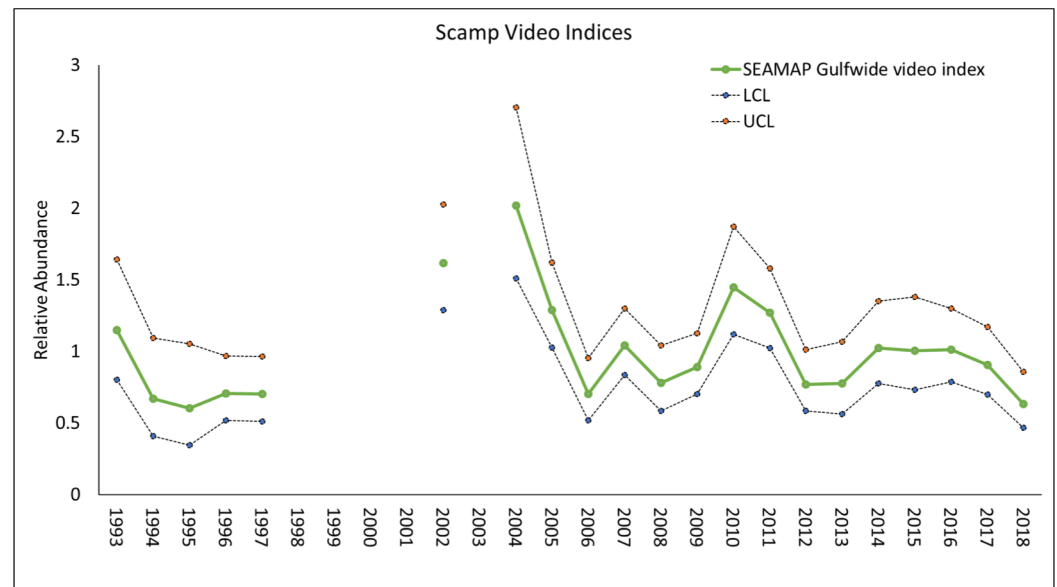
# Combined video index eGOM

- Pros:
  - Largest sample size possible for the eGOM by using data from PC, Pascagoula (SEAMAP), and FWRI
  - Covers several habitat, depth, and spatial strata
  - Length comps for this species are very similar
  - Large selectivity range for gear
- Issues
  - Doesn't incorporate West Gulf data from SEAMAP survey
    - Not needed previously in assessments



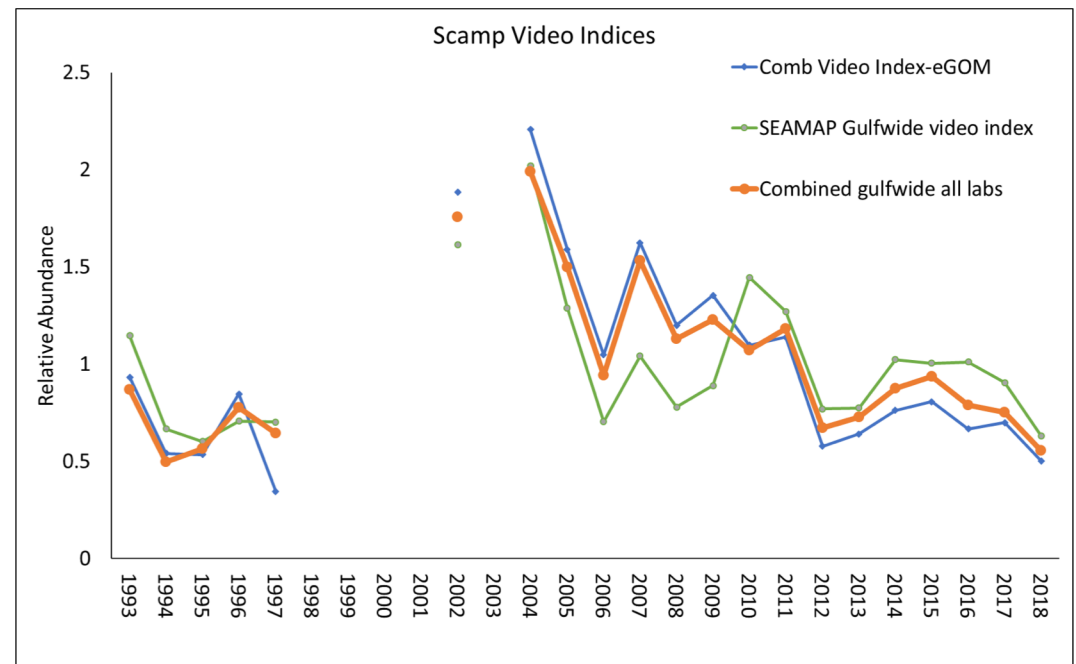
# SEAMAP video survey index

- Pros:
  - Longest time series for fishery-independent data
  - Covers Texas-Dry Tortugas
- Issues:
  - Misses critical, nearshore and low relief habitats Scamp are found on in other surveys (PC,FWRI)
  - Inclusion in assessment prevents use of significant amount of sampling in the eGOM



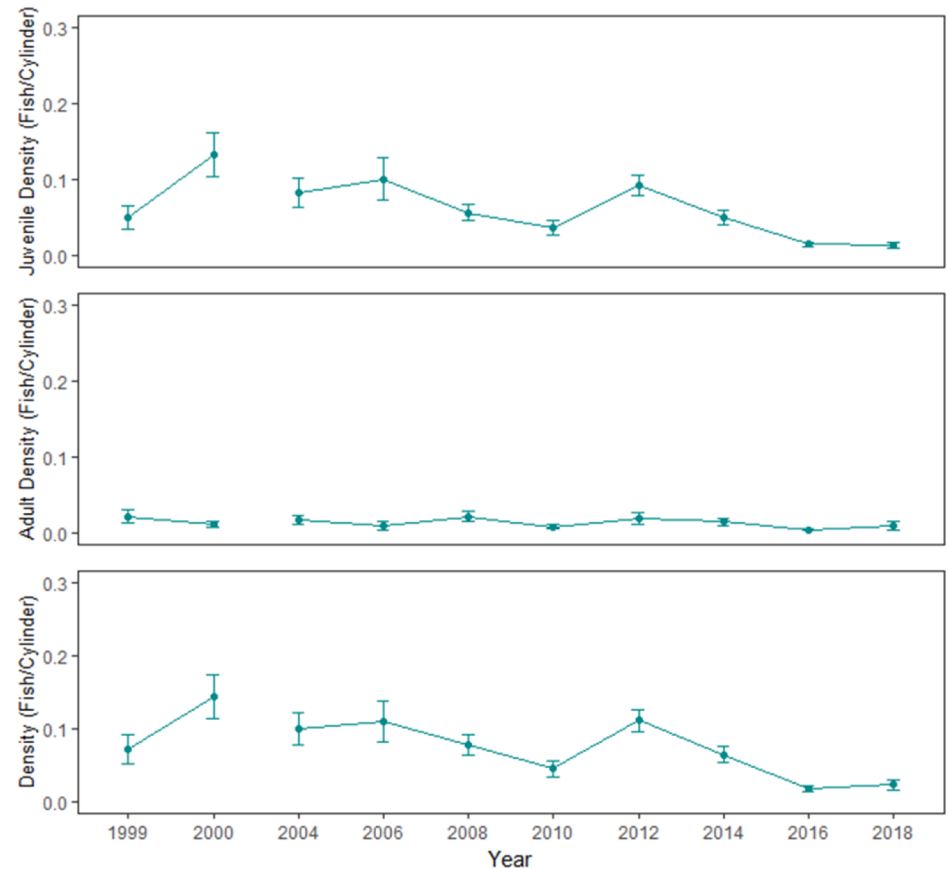
# Camera survey recommendations

- Patterns in population seem to be driven primarily by eGOM however Scamp catches in the wGOM aren't small enough to ignore
- Explore incorporation of West Gulf sites into the combined labs index with similar habitat model and weighting methods
  - Preliminary, not reviewed results
  - To be evaluated after plenary



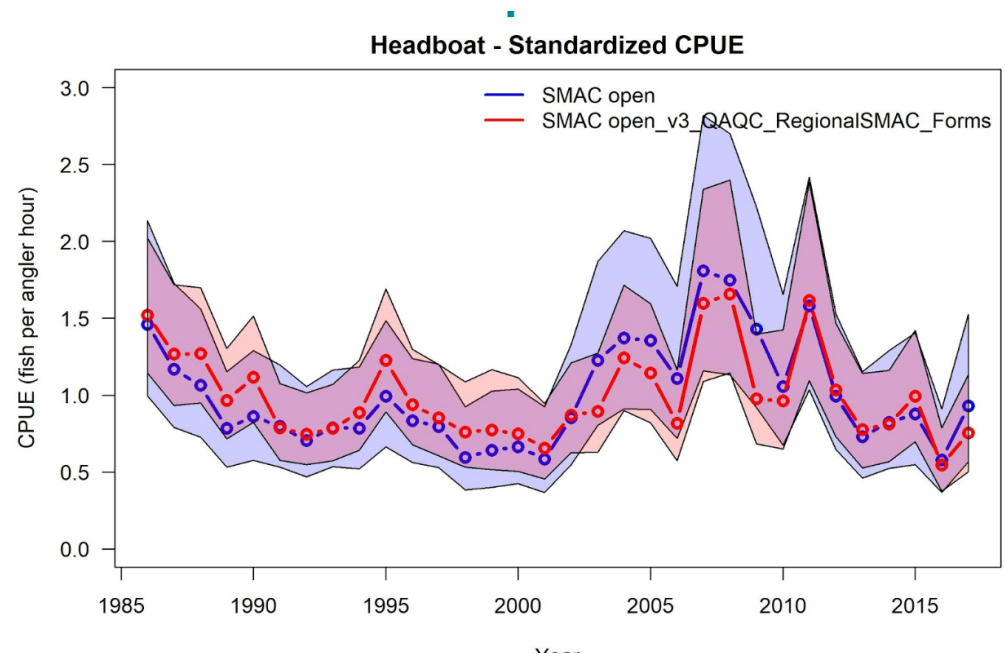
# Keys reef fish visual survey

- Pros:
  - Moderately long timeframe
  - Samples habitats that may be under-represented in other surveys
  - Includes information on smaller sized fish than other data sources
- Issues
  - Small spatial footprint for Tortugas
  - Too low of catches in Keys to be informative for South Atlantic
- Recommendation:
  - Not for use in this assessment



# Gulf Headboat Index

- Pros
  - Standard dataset and index used in regional assessments
  - Scamp not targeted specifically so likely more reflective of abundance than with other species
  - Research track opportunity to update data filtering and modeling procedure
- Issues
  - Discussions of best model forward with updated methods
  - Regional effects
- Recommendation
  - Will be used in assessment





# Review and next steps

- 2 indices recommended for the assessment
  - Headboat
  - Video survey (Gulf-wide SEAMAP, preliminary combined labs Gulf-wide)
- 1 index not recommended
  - Keys/Tortugas visual survey
- To be reviewed
  - Combined labs, Gulf-wide video survey
  - Fishery dependent indices in prep
    - Logbook indices: Longline and Vertical line, pre- and post-IFQs
  - Commercial index from observer program data

