Update from Five Technical Shrimp WGs

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SEAMAP Shrimp Indices Working Group

- Reviewing current methods for deriving SEAMAP summer and fall shrimp indices of abundance (delta-lognormal model)
  - Major sample design change 2008+ (e.g. 30 min tows, random stratified sampling design, sampling on WFL)
- Exploring alternative methods for deriving SEAMAP indices for shrimp
  - VAST (predicts density across space and time) & EDM (predicts SEAMAP 'next year' based on nonlinear ecosystem dynamics)

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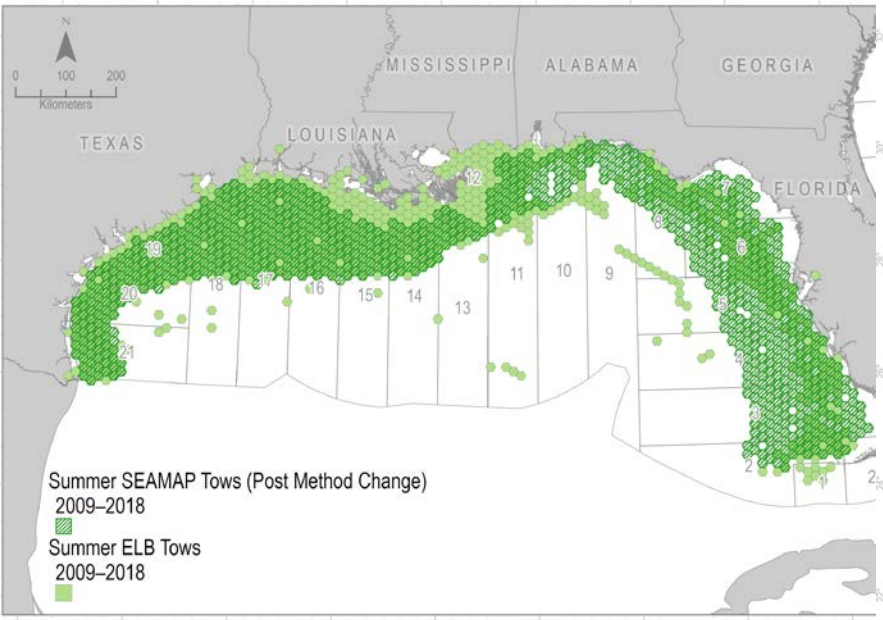
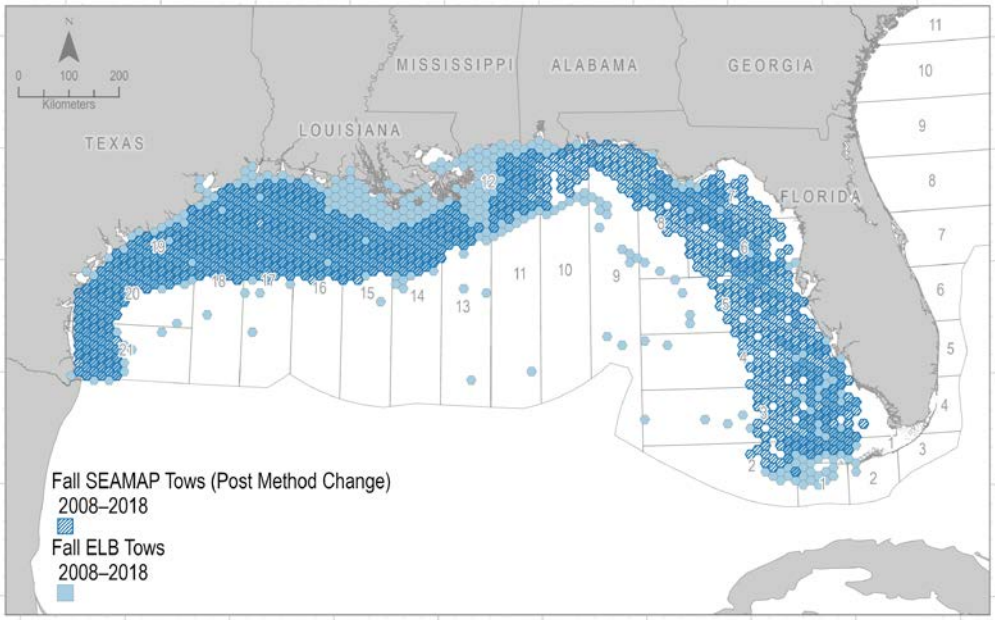
SEAMAP Shrimp Indices Working Group

- Maps of SEAMAP sampling areas vs area fished (based on cELB data)





- Next up: best practice recommendations

Shrimp Fishery Effort Estimation Working Group

On hold

- Waiting for the final Council/industry decision on new shrimp effort data collection method (& for LGL pilot study to conclude – ability to use P-SEA WindPlot to replace cELBs)
- Once new method is established and data begins transmitting to NMFS we will convene the WG (shouldn't blindly build/improve model without all the pieces in place)

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Shrimp Life History & Environmental Data WG

1st meeting was Nov 2nd

- Collate data from the literature and state inshore sampling to attempt to update life history param estimates (e.g. M, recruitment, growth)
- Collate *in situ* and/or literature-based environmental data, for future SA improvements
- Attempt to update growth parameters –early 2021; simultaneously tackling task #2 – evaluate spatial/temporal distributions of stocks to better represent catchability (q)

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Shrimp Catch Technical Working Group (D. Gloeckner)

1. Request GSFMC deliver the previous year's catch (through August) by Nov. deadline; to present assessments by spring
   - GSFMC agreed; now considering ACL tracking estimation procedures, to est. missing trip ticket reports (Aug-Dec)
2. Another timeliness issue is getting trip ticket data early enough from states, so NMFS can include it in the monthly shrimp report
   - States agreed to have shrimp landings data available with a two month lag time, or work to develop an estimation process to account for any missing data
   - WG needs to meet again to develop a work plan with states to meet shrimp "monthly" reporting needs

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Shrimp Bycatch Estimation Working Group (X. Zhang)

Statement of Work:

1. The WG will review the draft report from the 2017 Workshop to Evaluate Data Inputs and Methods for Estimating Reef Fish Bycatch in the Gulf of Mexico Shrimp Fishery
2. The WG will develop best-practice guidance; documenting & justifying any revisions to the previous WG's recommendations and conclusions, as needed

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Shrimp Bycatch Estimation Working Group (X. Zhang)

Progress to date:

- Three, 2-hour webinars
- Reviewed some of the data inputs & methods currently used for the estimation of shrimp bycatch
- In an attempt to adapt to a more engaging setting, we've formed 4 focused, sub-working groups: shrimp effort (M. Masi), SEAMAP (A. Pollack), Observer data (L. Scott-Denton), bycatch modeling & development (X. Zhang)

➢ Liaisons (above) will present major findings to the main WG periodically, to garner broader feedback and inputs

➢ We expect there will be a few data/modeling iterations & feedback loops before we can finalize the best-practice guidance

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