

Bait: Base of the Coastal Food Web



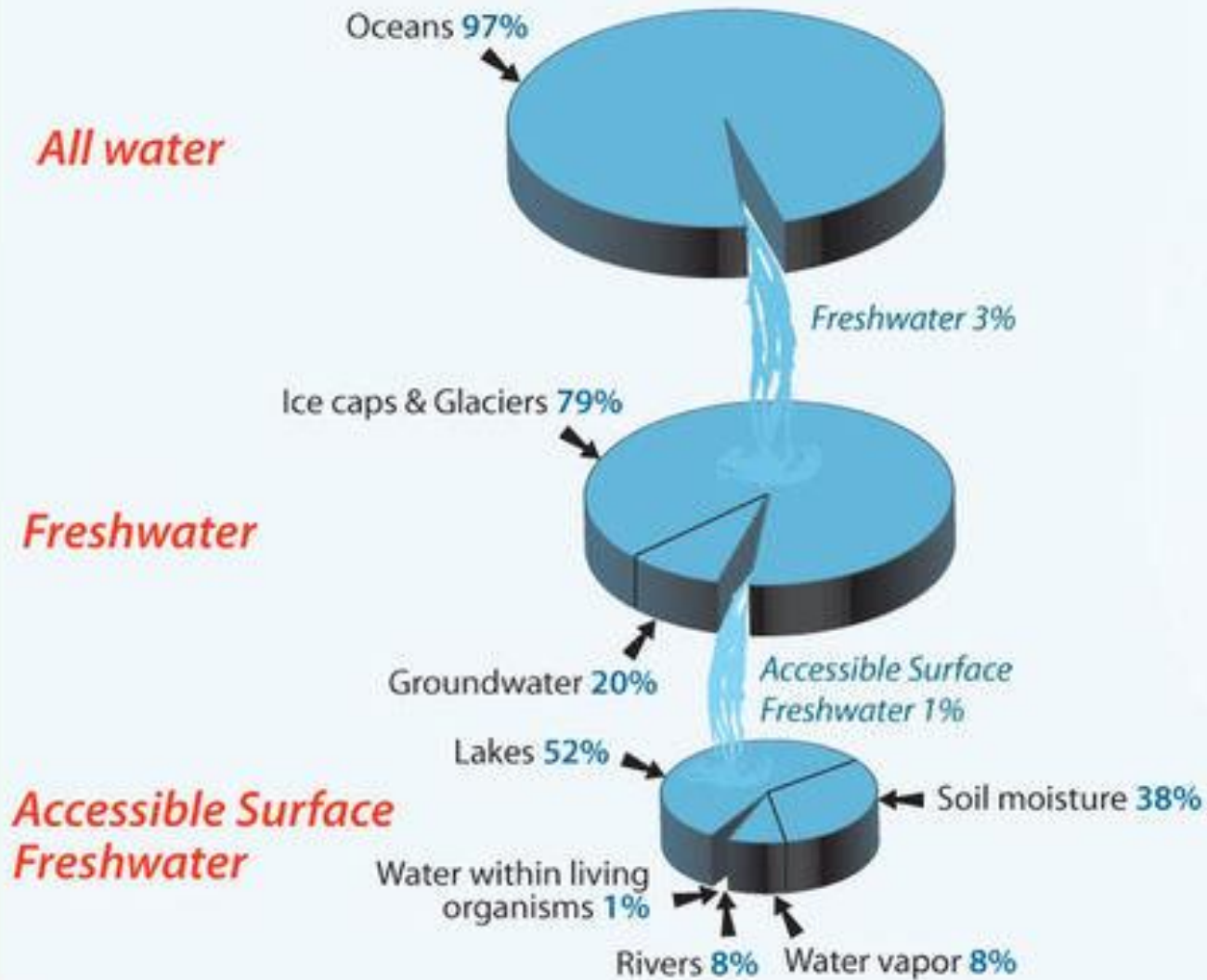
Leslie D. Hartman
Matagorda Bay Ecosystem Leader



Earth – Closed Loop System



Distribution of the World's Water



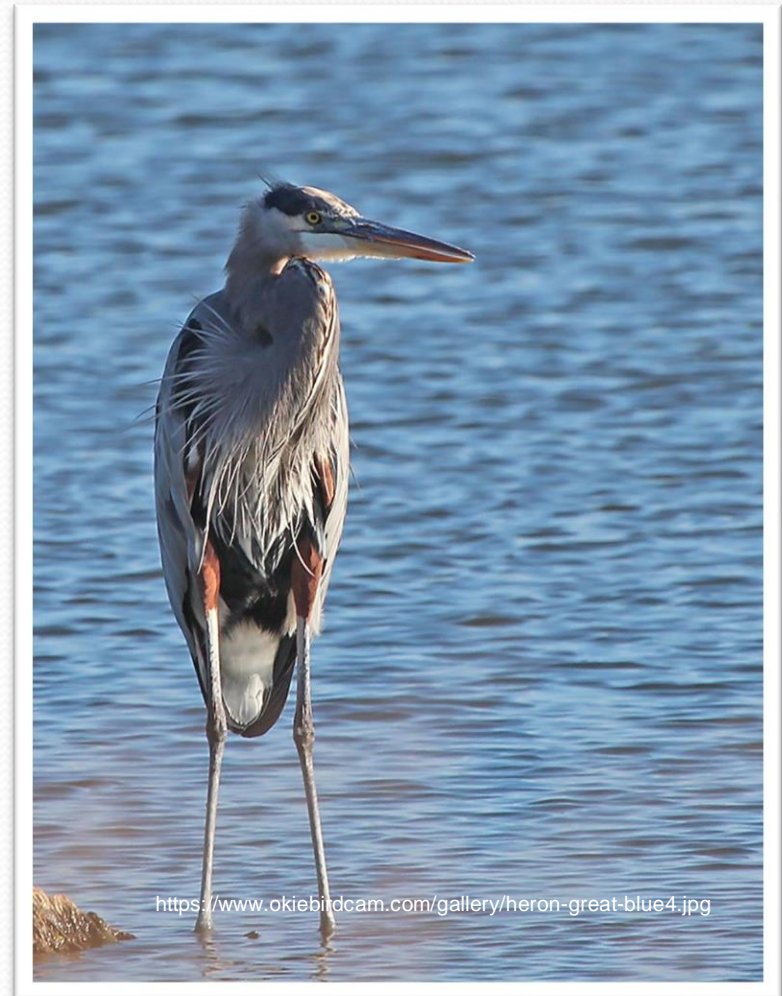
Pelicans

- Diet:
 - **Fish**
 - Menhaden, silversides, pigfish, and mullet
 - **Shrimp**
 - Occasionally
 - Amphibians
 - Eggs and nestlings
 - Egrets, common murrelets, and other pelicans



Great Blue Herons

- Diet:
 - **Fish**
 - Amphibians
 - Reptiles
 - Small mammals
 - Insects
 - Other birds



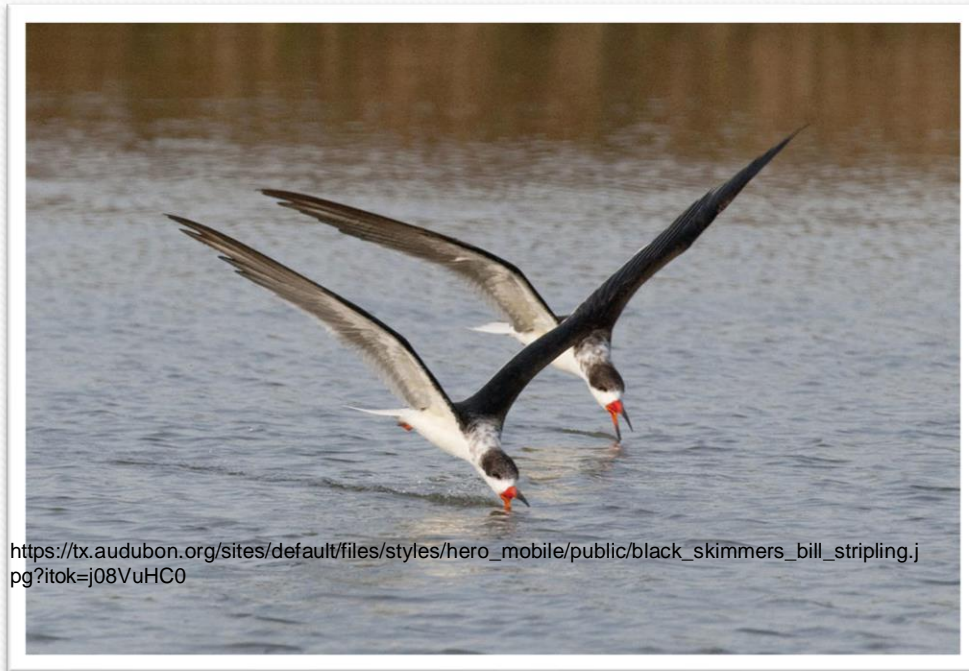
Roseate Spoonbills

- Forage top 5 inches water
- Diet:
 - **Fish**
 - **Shrimp**
 - Aquatic insects



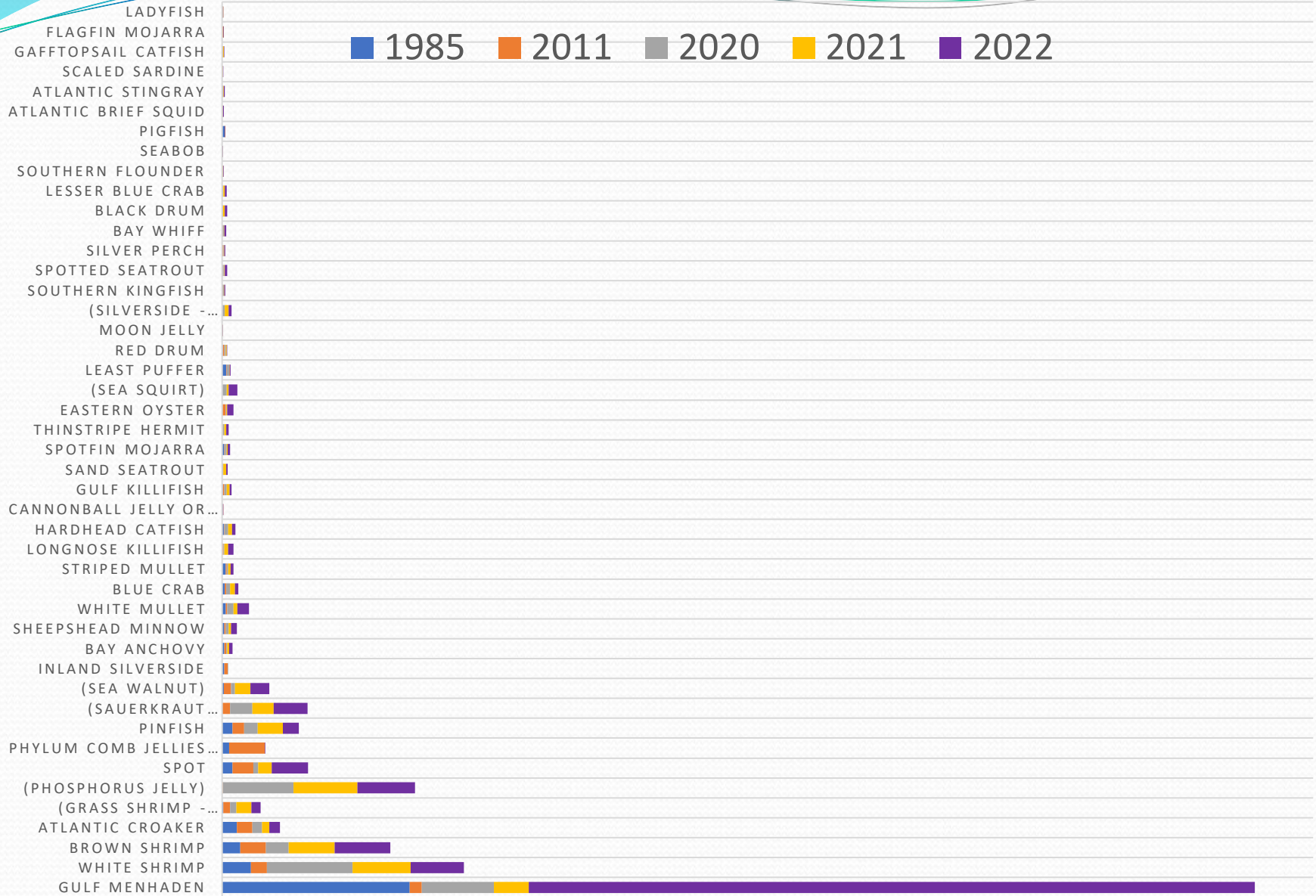
Black Skimmers

- Forage mostly when winds are light and waters calm
- Diet:
 - **Fishes < 5 inches**
 - Killifish species, flounder, menhaden, bay anchovy, spot, bluefish, silversides, herring, pipefish, sea trout, mullet, snapper, Spanish mackerel, and sharksucker
 - **Shrimp**
 - **Blue crab** (when molting)



https://tx.audubon.org/sites/default/files/styles/hero_mobile/public/black_skimmers_bill_stripling.jpg?itok=j08VuHC0

WEST MATAGORDA SEINE SPECIES



What a Critter Wants

Shelter

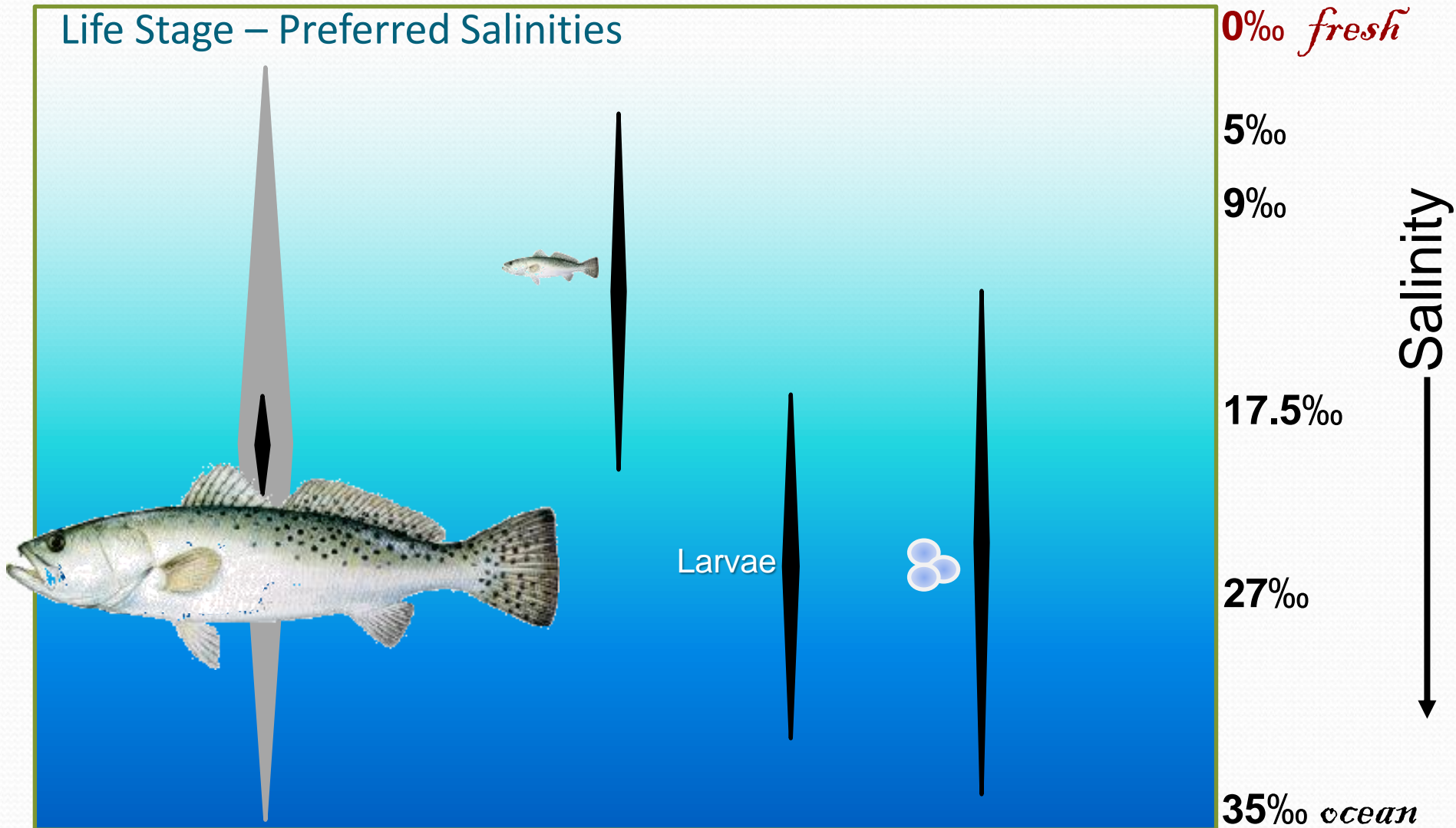


Food



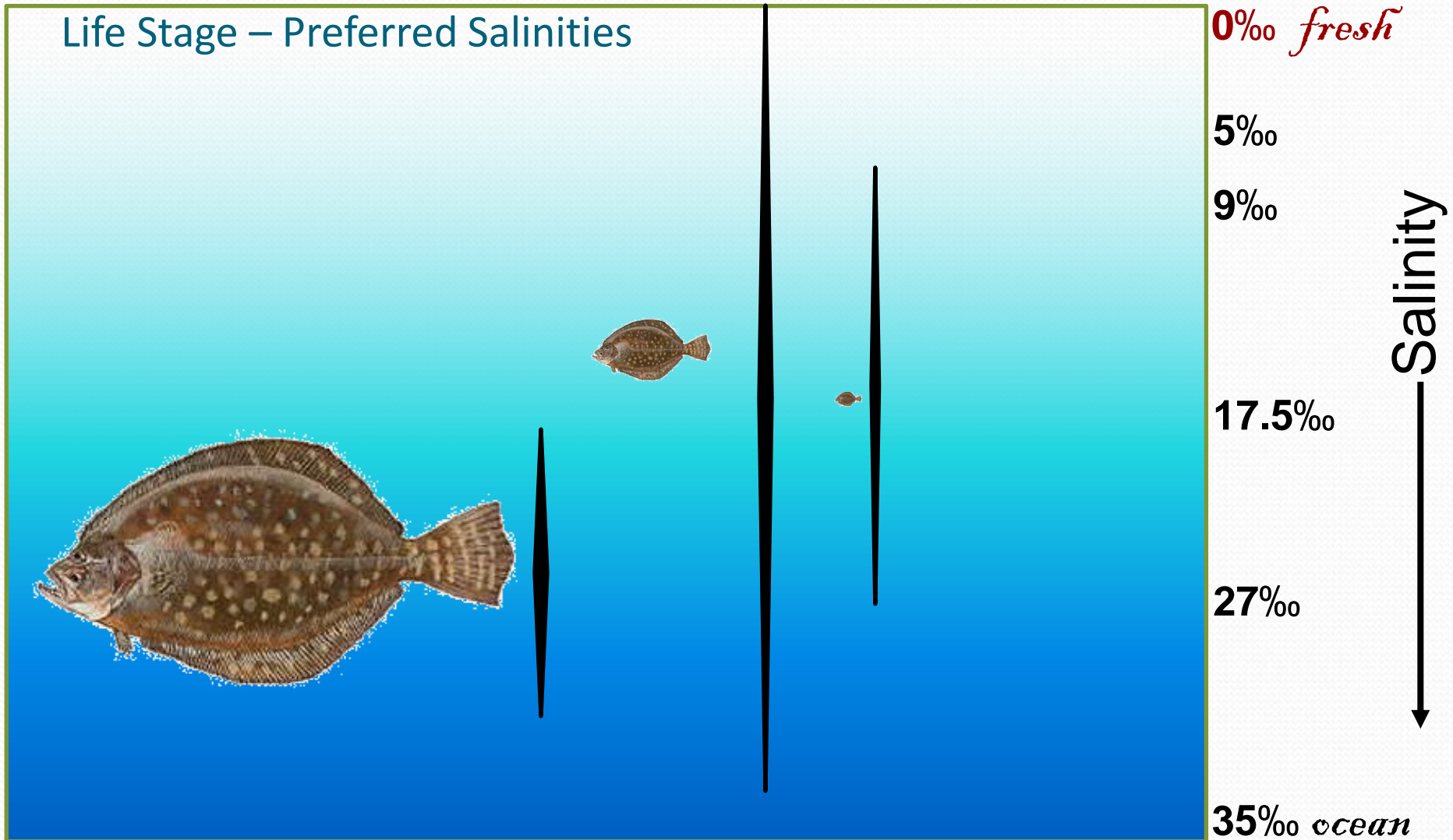
Spotted Seatrout

Life Stage – Preferred Salinities



Southern Flounder

Life Stage – Preferred Salinities



Gar

Life Stage – Preferred Salinities



Larvae



0‰ *fresh*

5‰

9‰

17.5‰

27‰

35‰ *ocean*

Salinity



Theadfin Shad

Life Stage – Preferred Salinities

Larvae ↓

Eggs ↓

0‰ *fresh*

5‰

9‰

17.5‰

27‰

35‰ *ocean*

Salinity

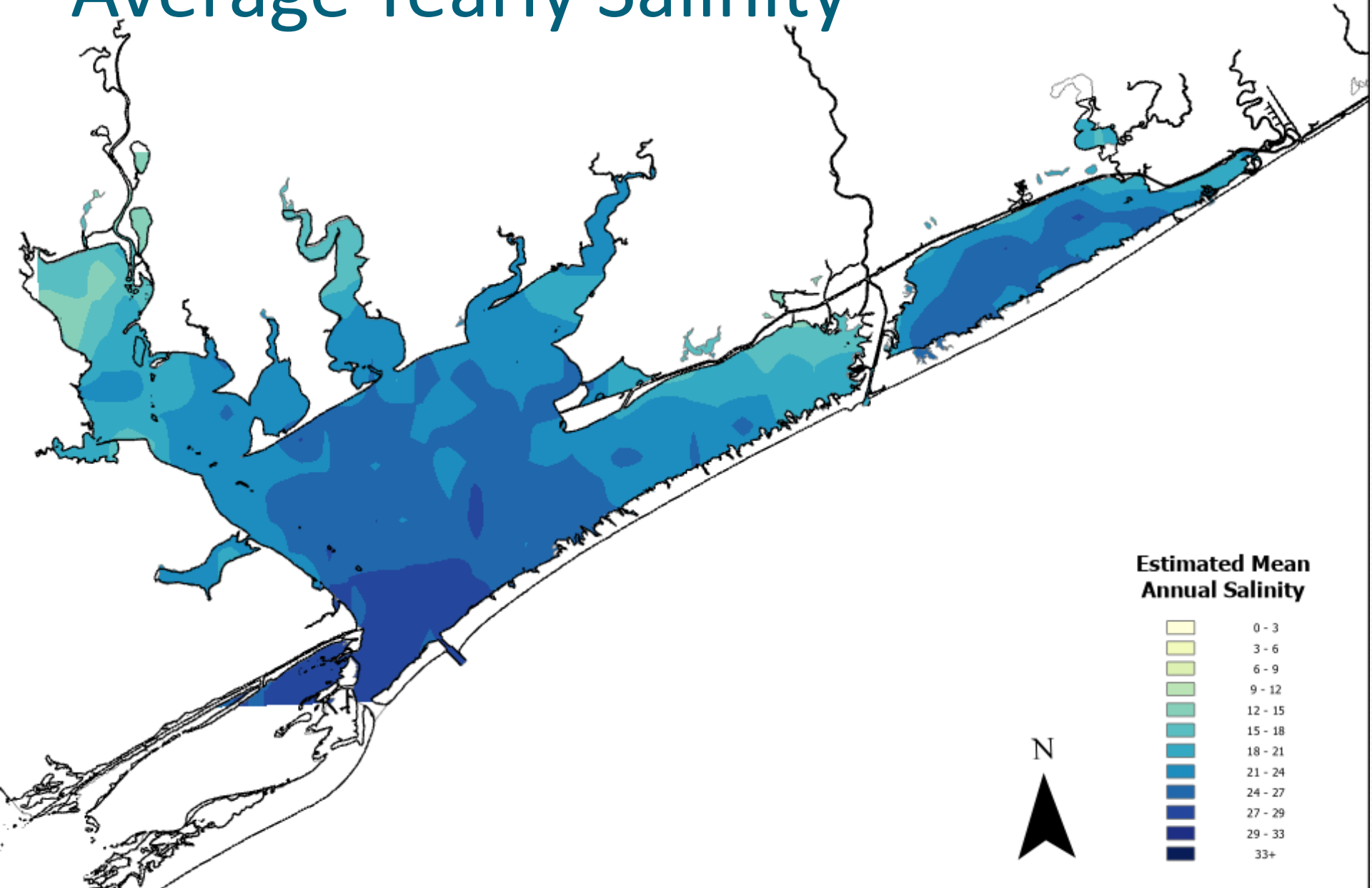


TPWD Animal Species Encountered (1983-2022)

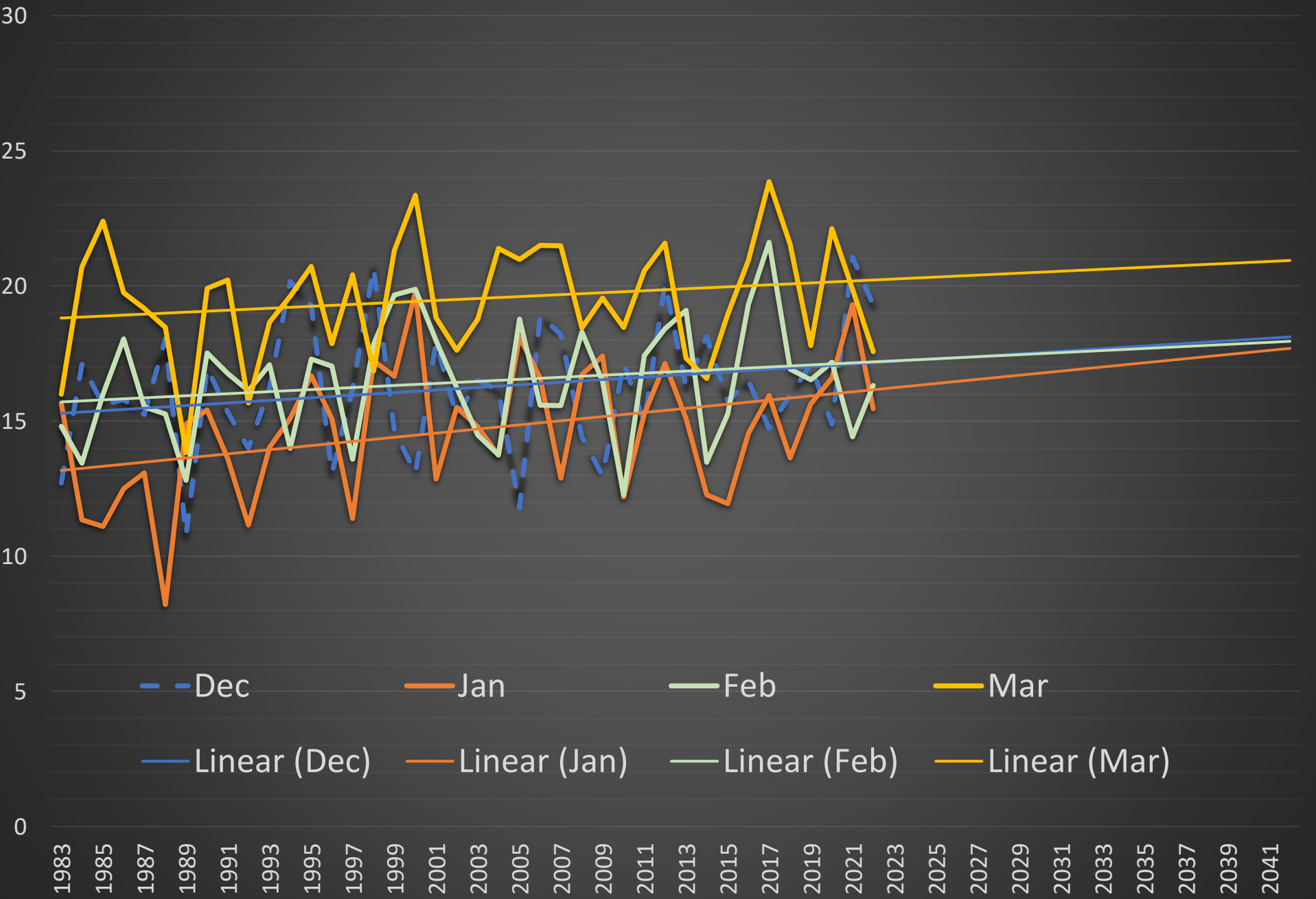
- Coastwide – 826 animal species
 - Inshore - 709 species
 - West Matagorda Bay - 387 species

Quantity & Quality

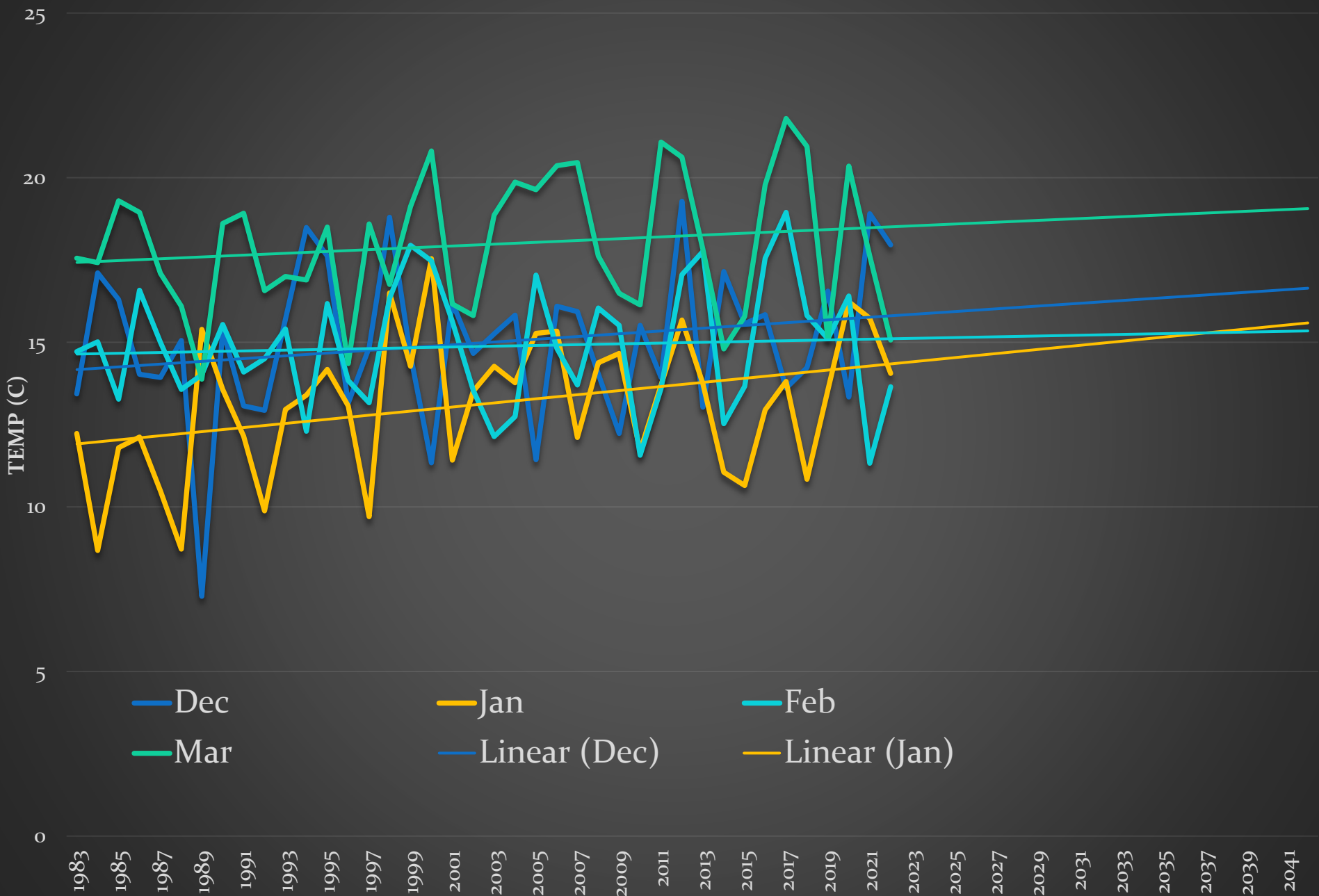
Average Yearly Salinity



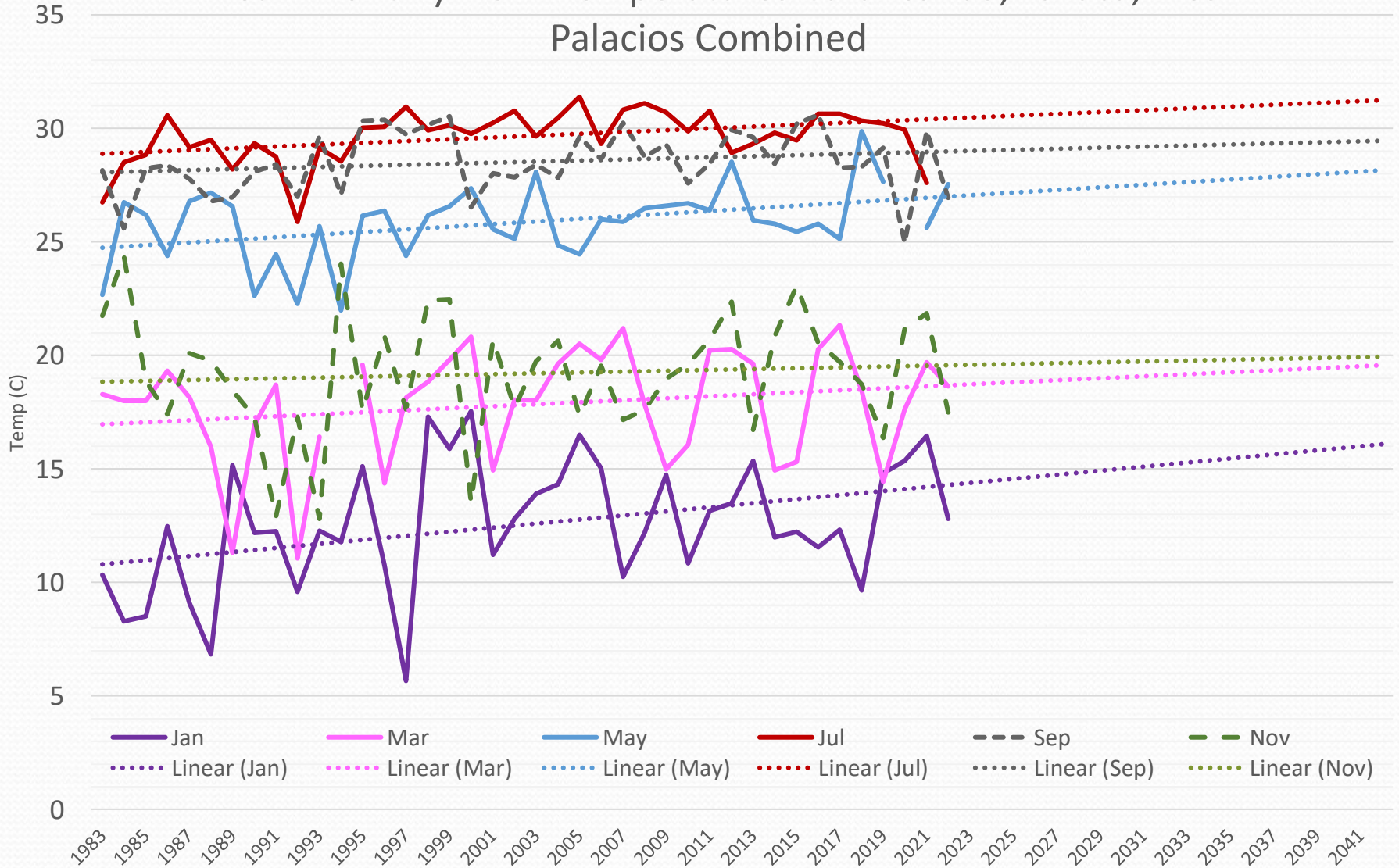
Average Shallow Water Temperatures West Matagorda Bay



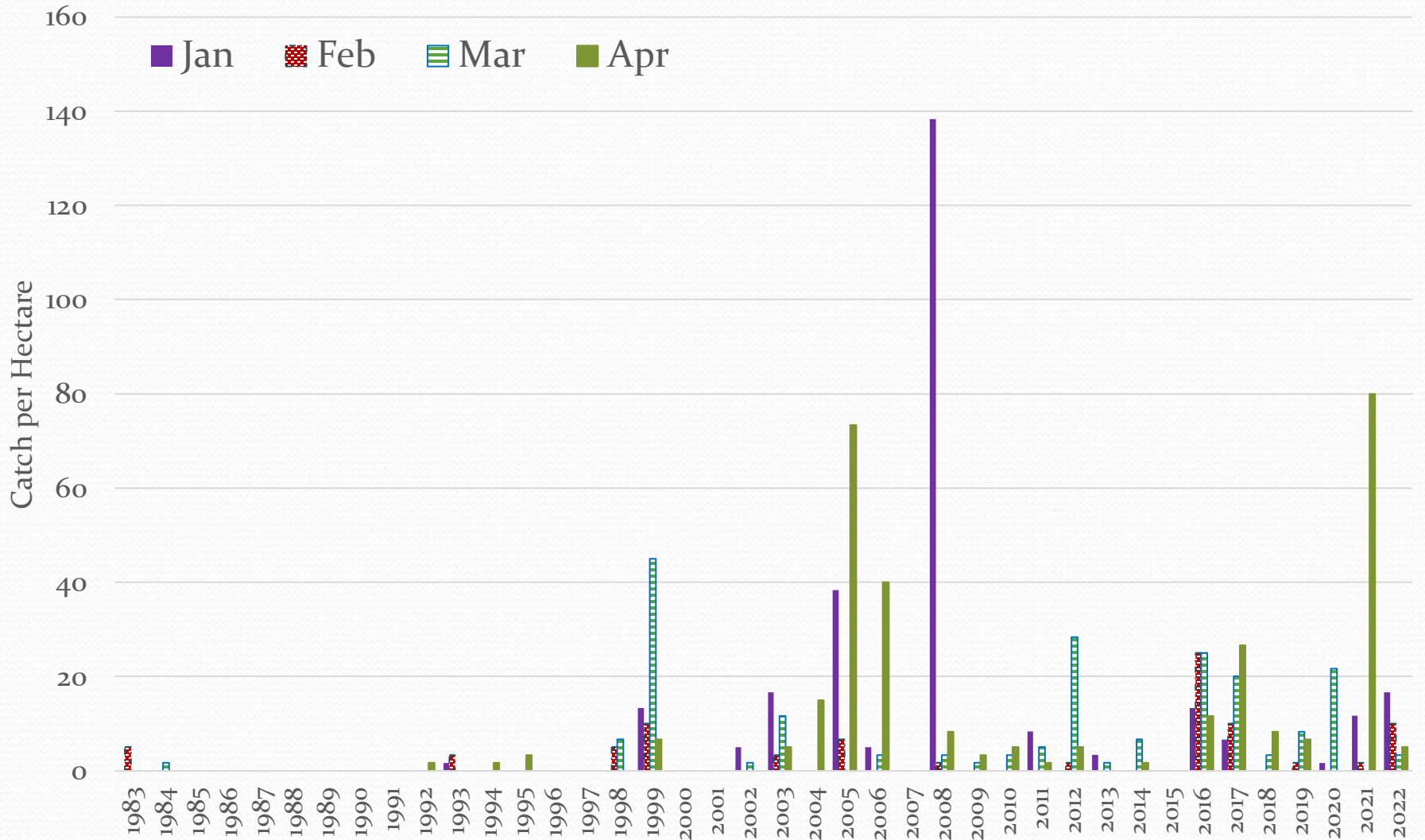
Average Deep Water Temperatures West Matagorda



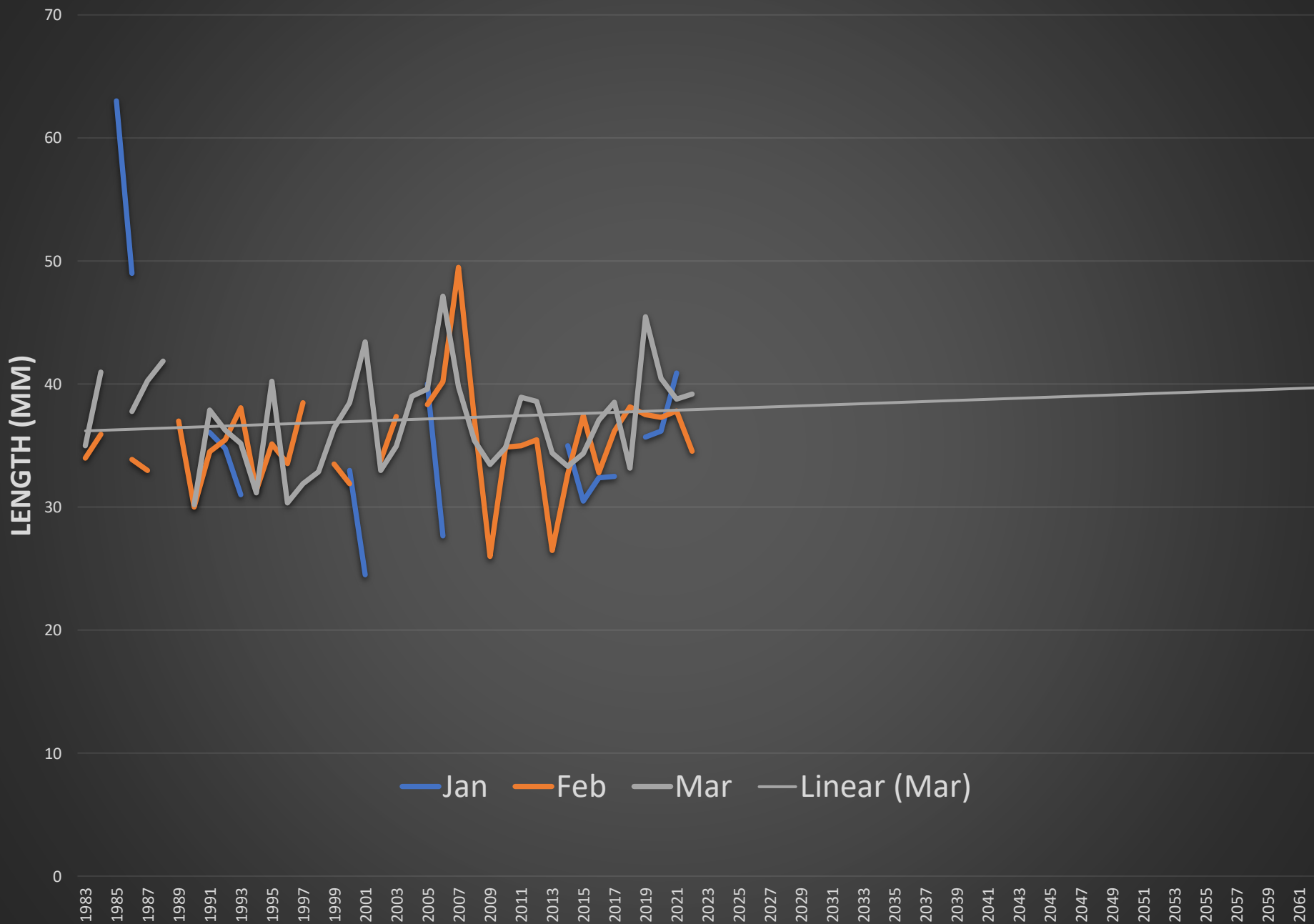
Mean Monthly Trawl Temperatures Carancahua, Lavaca, Tres Palacios Combined



Average White Shrimp Seine Catch / Hectare



Gulf Menhaden Length Trends West Matagorda





Action for the Future

- Texas Senate Bill 2 and 3



Xeriscaping



- Plant Trees & Understory
- Conservation Easements
 - Wildlife Preserves



- Require new business do a water-use analysis



PLEASE
DO NOT
FEED
PELICANS

MATAGORDA HARBOR
MATAGORDA, TEXAS

TEXAS
PARKS &
WILDLIFE

