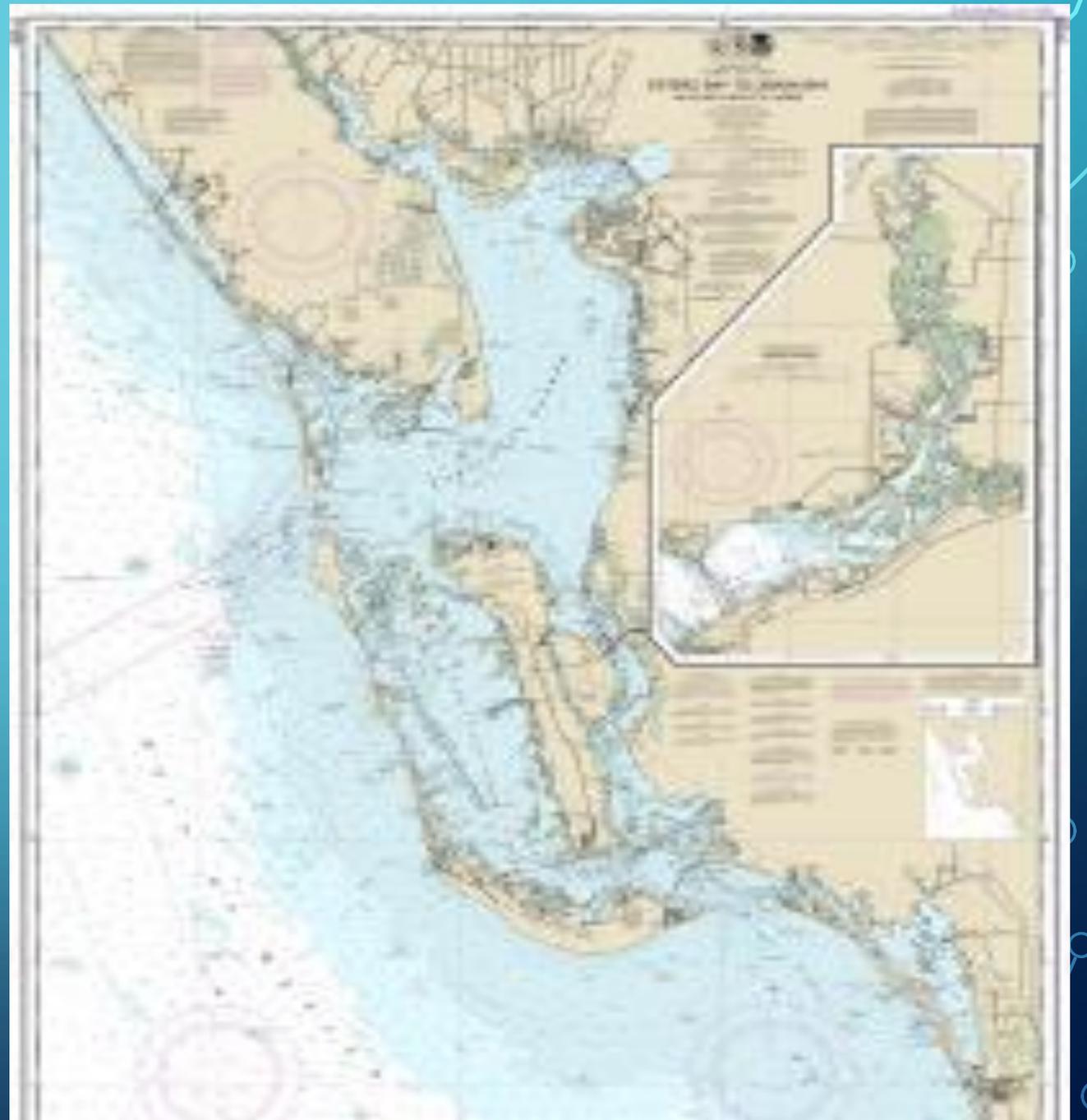
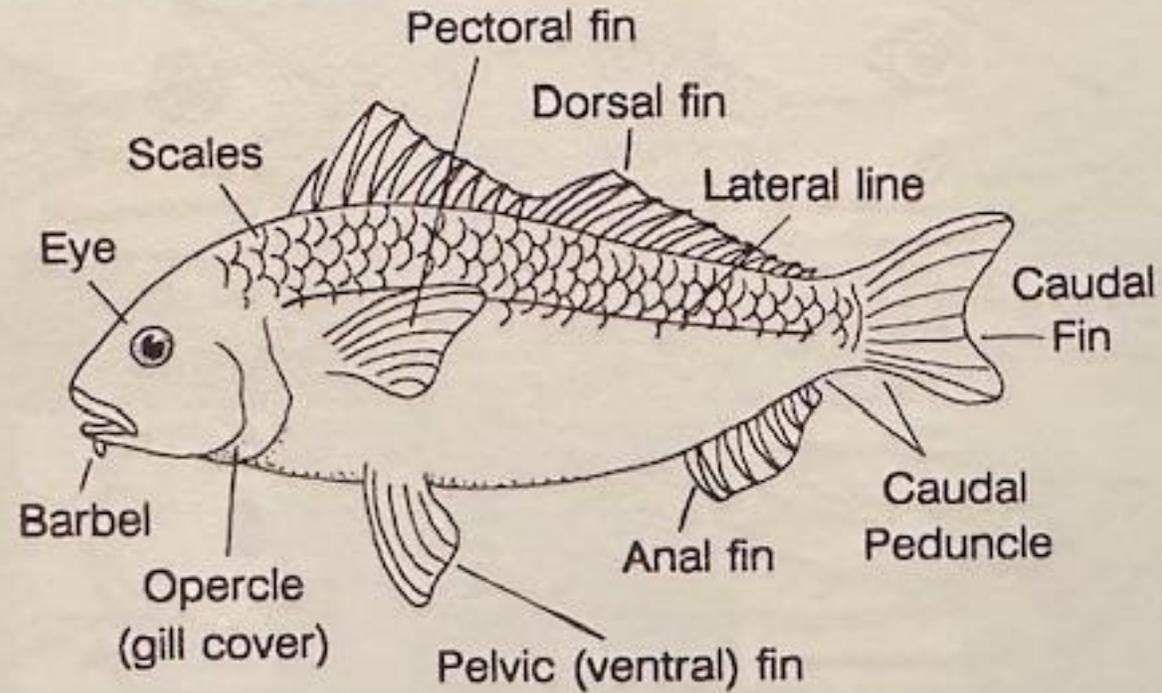


# CHARLOTTE HARBOR

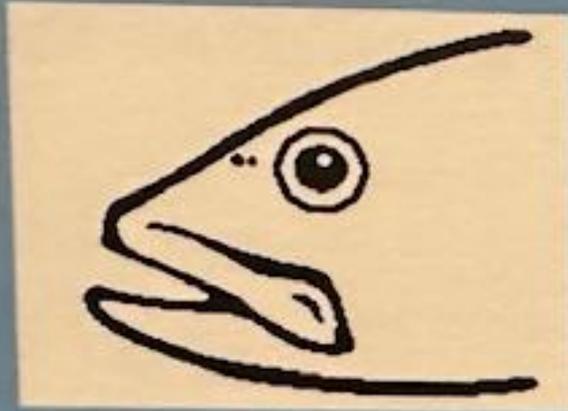


## Saltwater Fish - Morphology

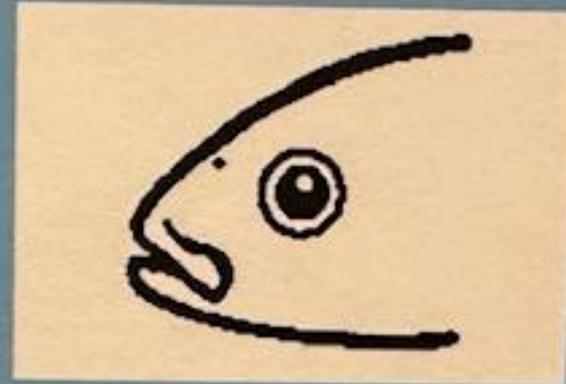


Source: Rookery Bay NERR

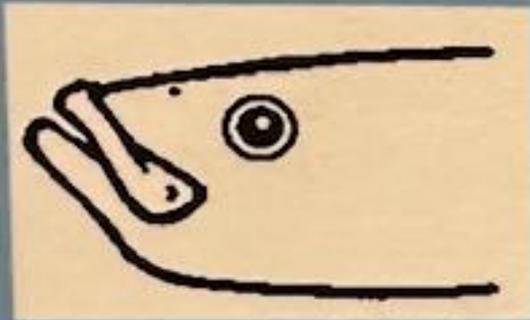
# Fish Mouths - Feeding Adaptations



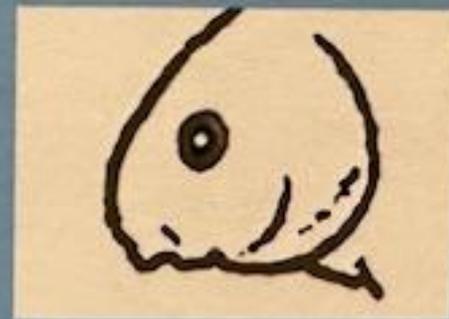
**Large mouths:**  
large prey; filter feeders



**Small mouths:**  
small prey; omnivores



**Upturned mouths:**  
surface and bottom  
ambush feeders

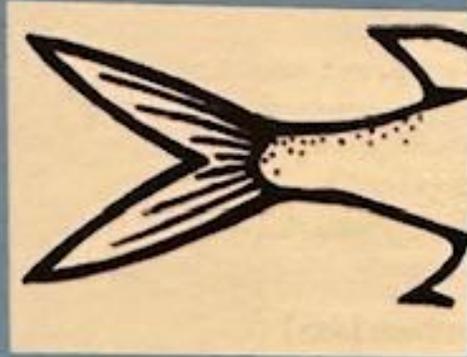


**Downward mouths:**  
bottom feeders; gleaners

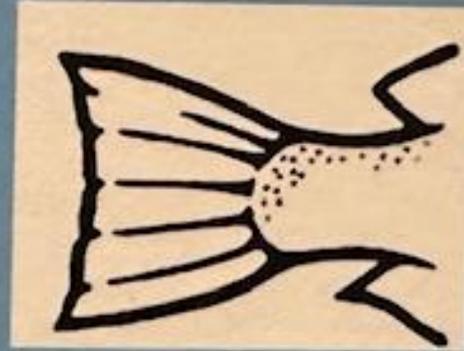
Source: Seaworld

# Fish Tails – Swimming Adaptations

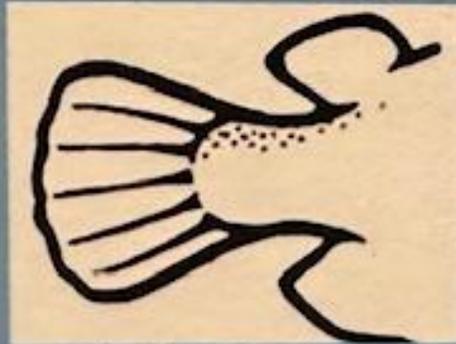
(tail fin = caudal fin)



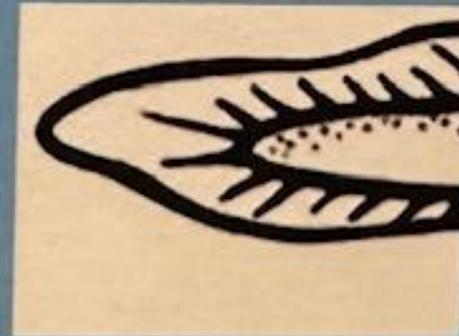
**Deeply forked tails:**  
strong, fast, long distance



**Squared, truncate tails:**  
strong, slow swimmers



**Rounded tails:**  
Slow, weak, short distance



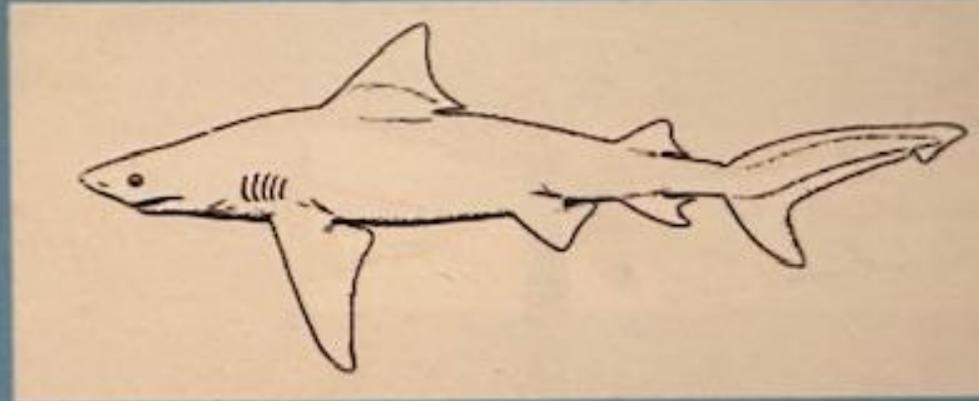
**Elongate, continuous:**  
slow, eel-like, maneuver cover, crevices

Source: Seaworld

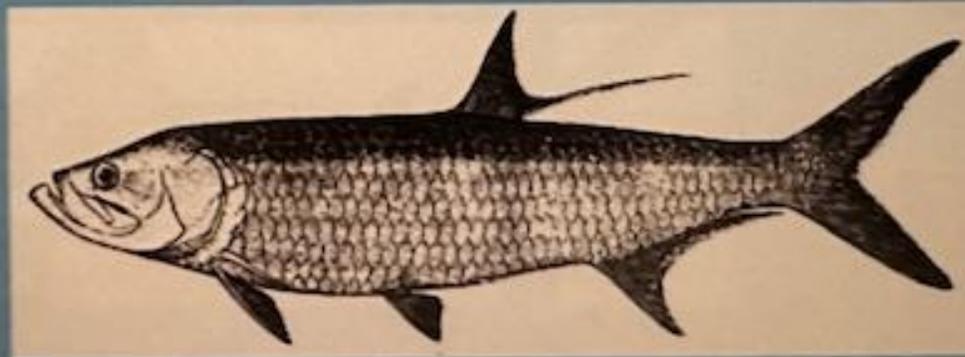
# Major Evolutionary Classes of Fish

2 major groups

Cartilaginous Fishes (elasmobranchs)



Bony Fishes



Source: NEFSC

# Cartilaginous Fishes



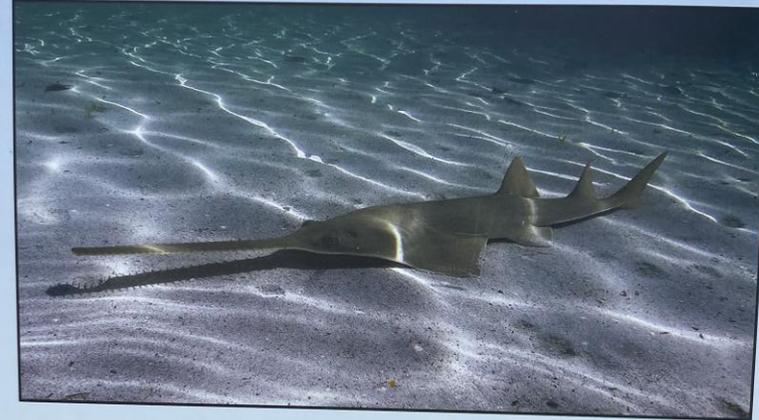
# SAWFISH



## Sawfish Are Endangered.

**Respect • Release • Report**

Sawfish are protected by State and Federal laws:  
It is illegal to harm, harvest, or handle sawfish



### You Can Help Save Smalltooth Sawfish

#### Angler Guidance:

- ▶ Release sawfish immediately
- ▶ Never lift from the water or drag ashore
- ▶ Do not use gaffs or ropes to secure
- ▶ Cut the line as close to the hook as possible

#### Diver Guidance:

- ▶ Keep your distance
- ▶ Avoid disturbing sawfish
- ▶ Do not chase or pursue
- ▶ Never feed or touch

### Share Information About Your Encounter

**1-844-4SAWFISH**  
**[www.SawfishRecovery.org](http://www.SawfishRecovery.org)**

*The information you provide helps scientists track sawfish recovery*



# SNOOK



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# MANGROVE



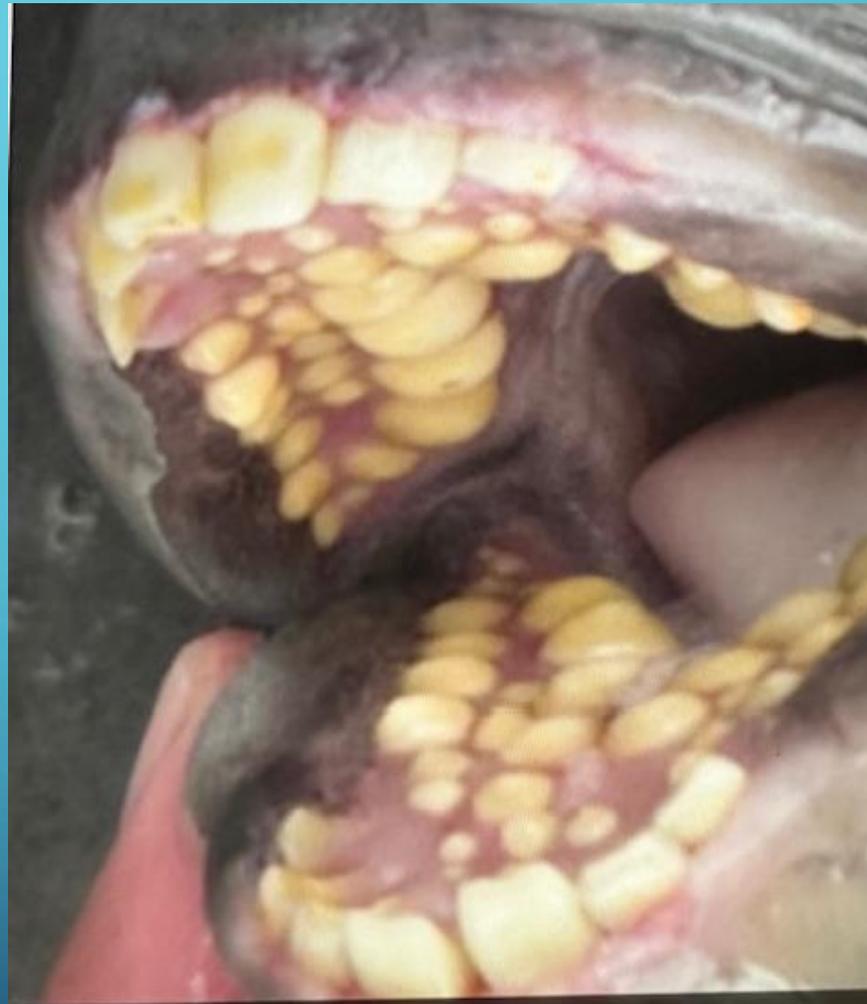
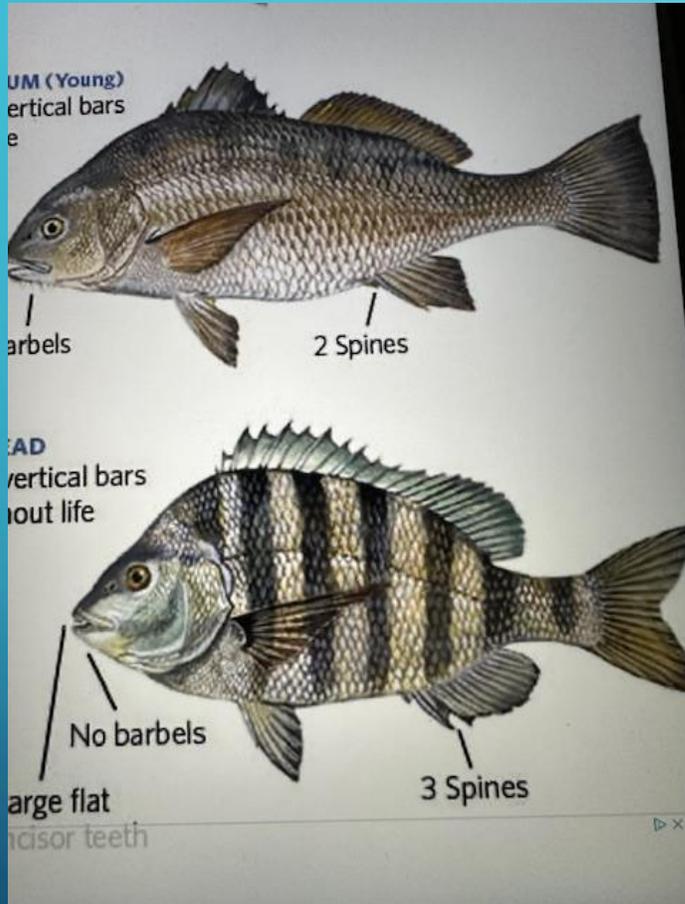
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# PINFISH



# CREATURE





Teeth of a sheepshead.

# MULLET



# TARPON





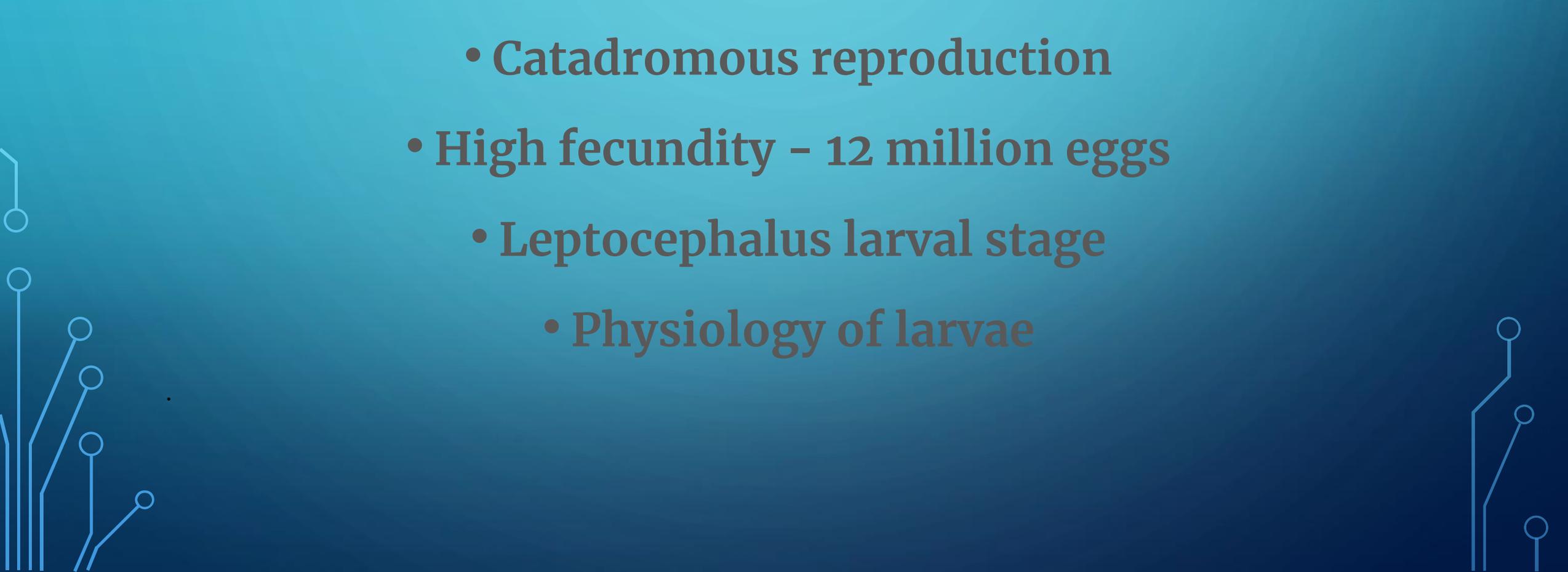


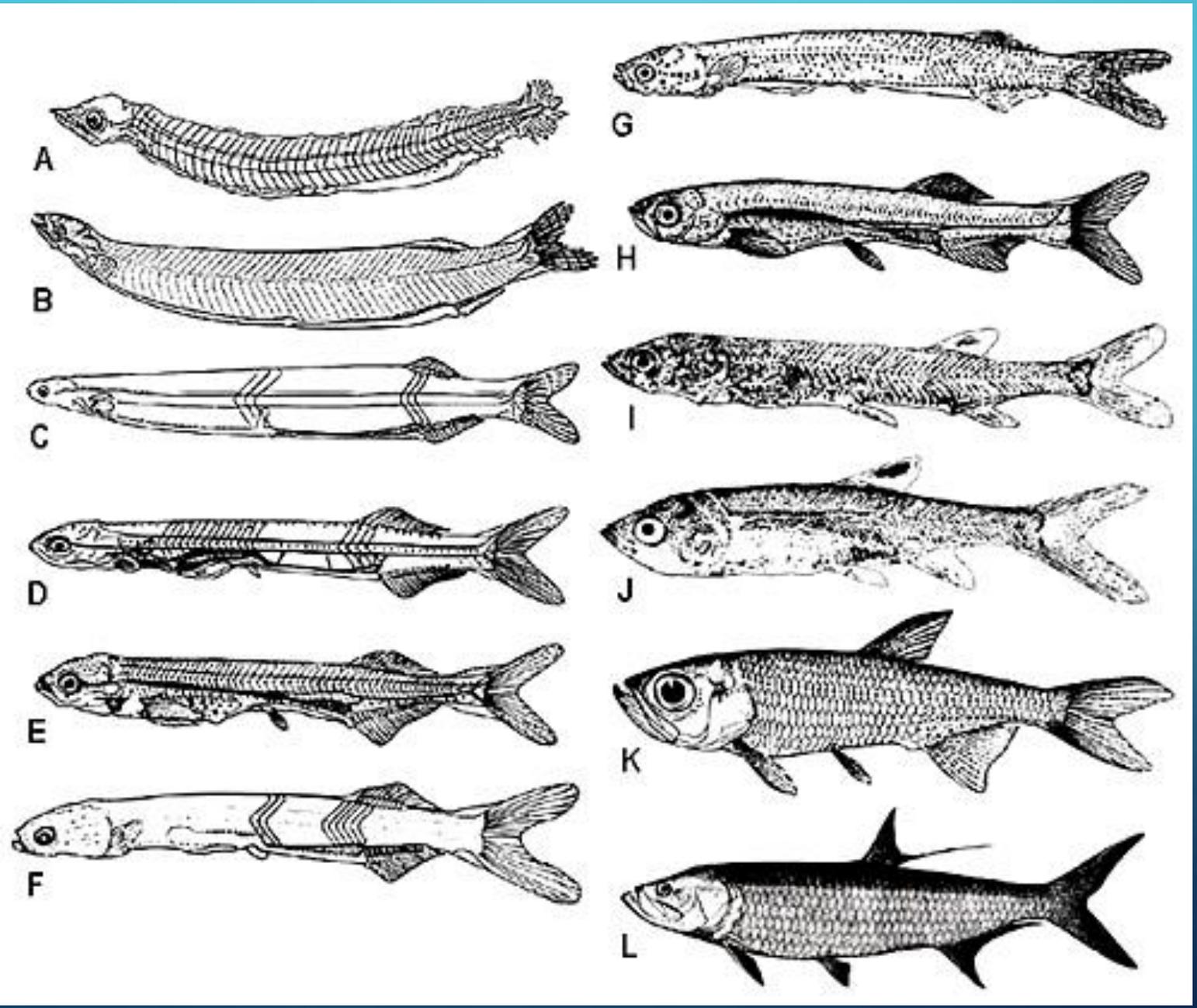
# Atlantic Tarpon Adaptations

- Ability to breathe free air through swim bladder as well as breathing with gills
  - Complex eyes and changes with age
- Migration triggered by ambient water temperature



# • Reproductive Characteristics and Adaptations of Atlantic tarpon

- Catadromous reproduction
  - High fecundity - 12 million eggs
    - Leptocephalus larval stage
      - Physiology of larvae
- 





# AMERICAN SHAD *ALOSA* *SUPIDISSIMA*



# ANADROMOUS FISH IN FLORIDA

Florida has 1 species of anadromous fish the  
American shad, *Alosa sapidissima*.

These fish spawn in Northeast Florida in the St  
Johns and Nassau Rivers and migrate out to sea  
for their adult lives



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# GOLIATH GROUPE



fwc

# GOLIATH GROUPER



# TRIPLETAIL



# RED DRUM



# REDFISH TAIL SPOT



# LADYFISH



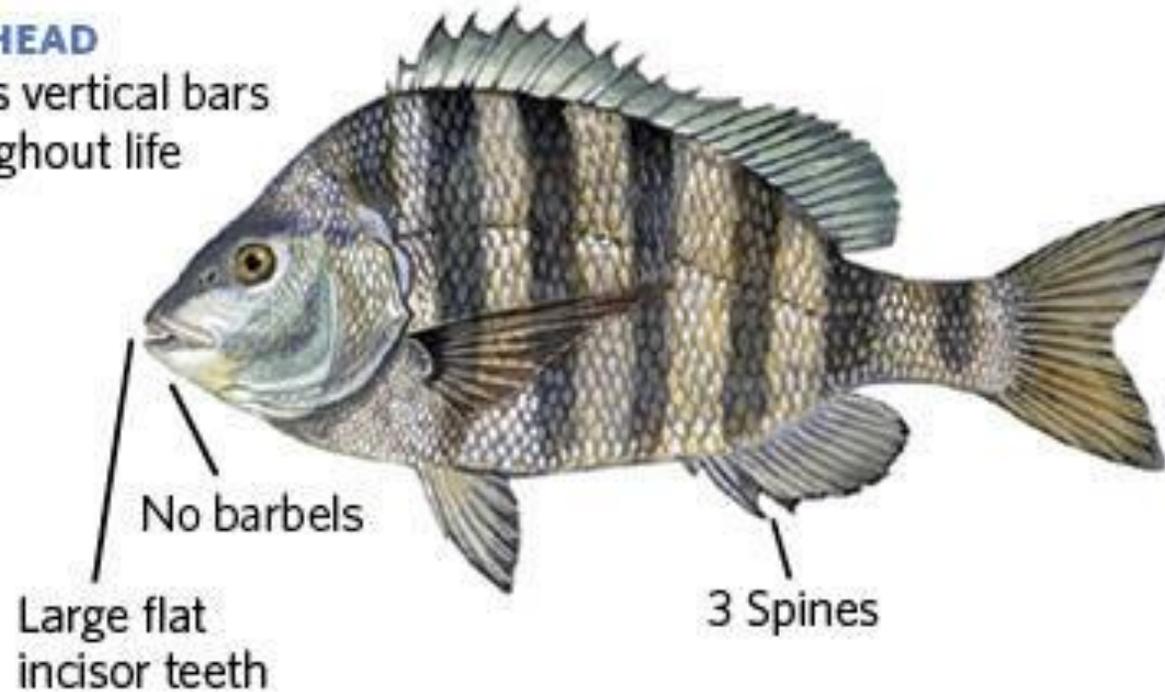
# PINFISH



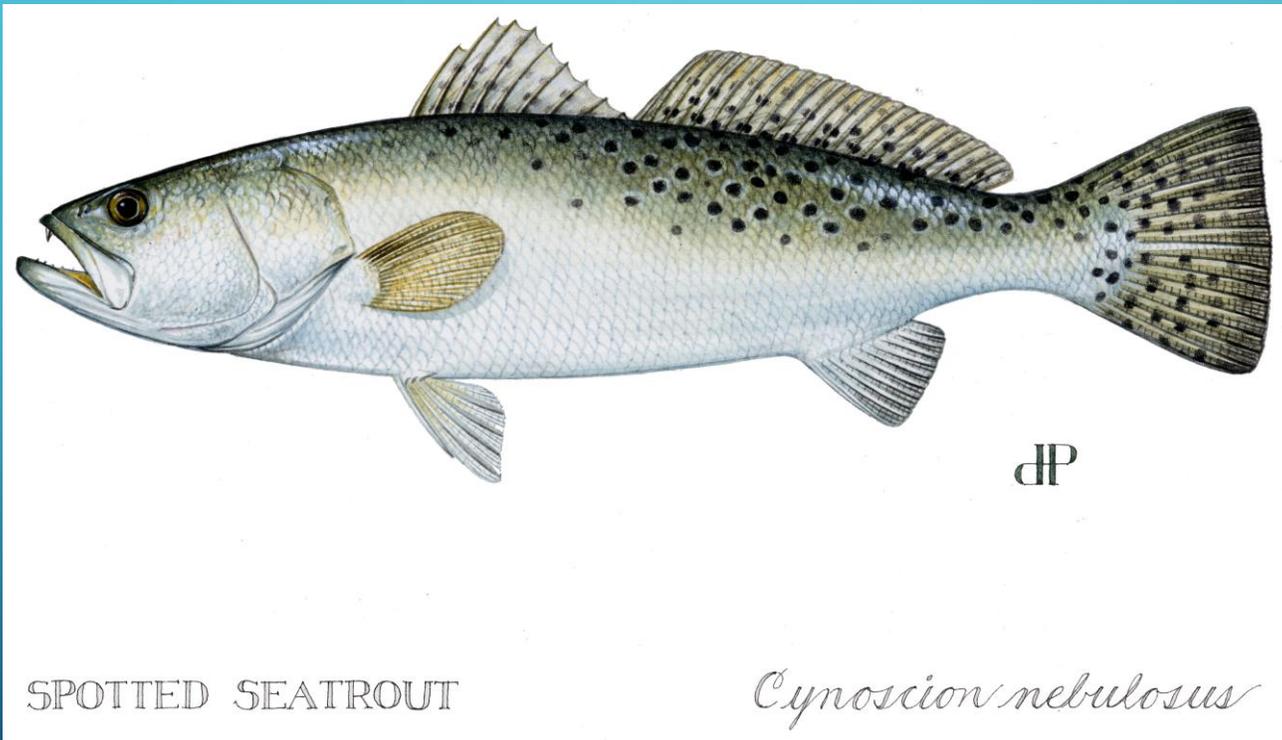
# BLACK DRUM

## SHEEPSHEAD

- Keeps vertical bars throughout life



# SPECKLED TROUT



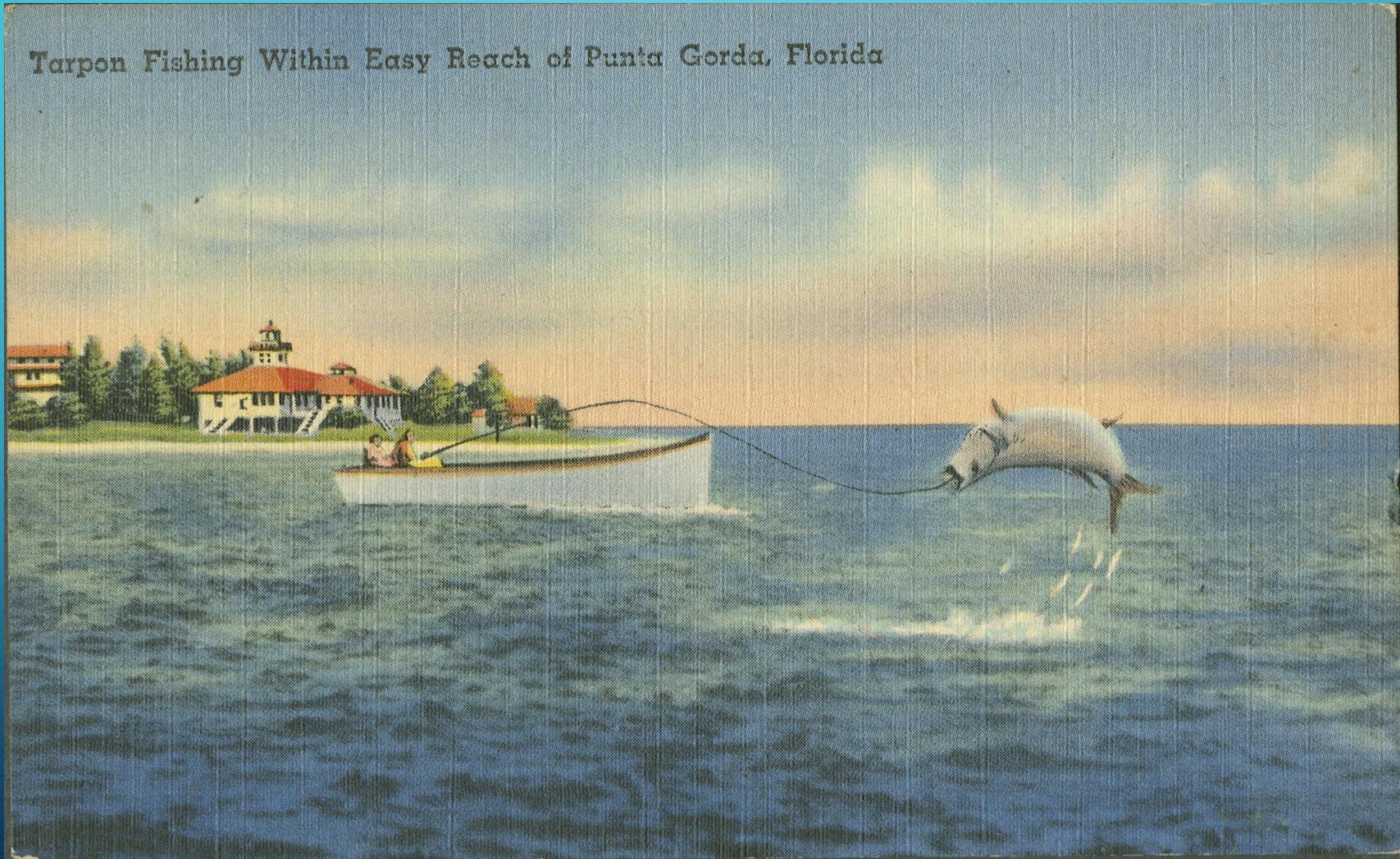
SPOTTED SEATROUT

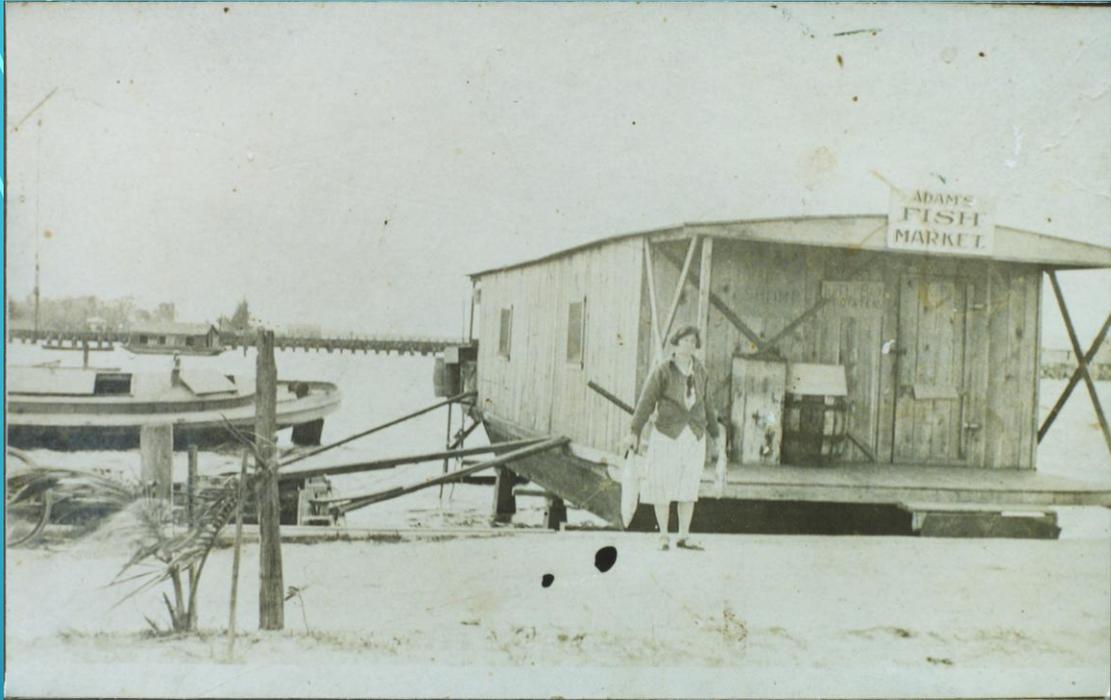
*Cynoscion nebulosus*

# TAGGED HOGFISH



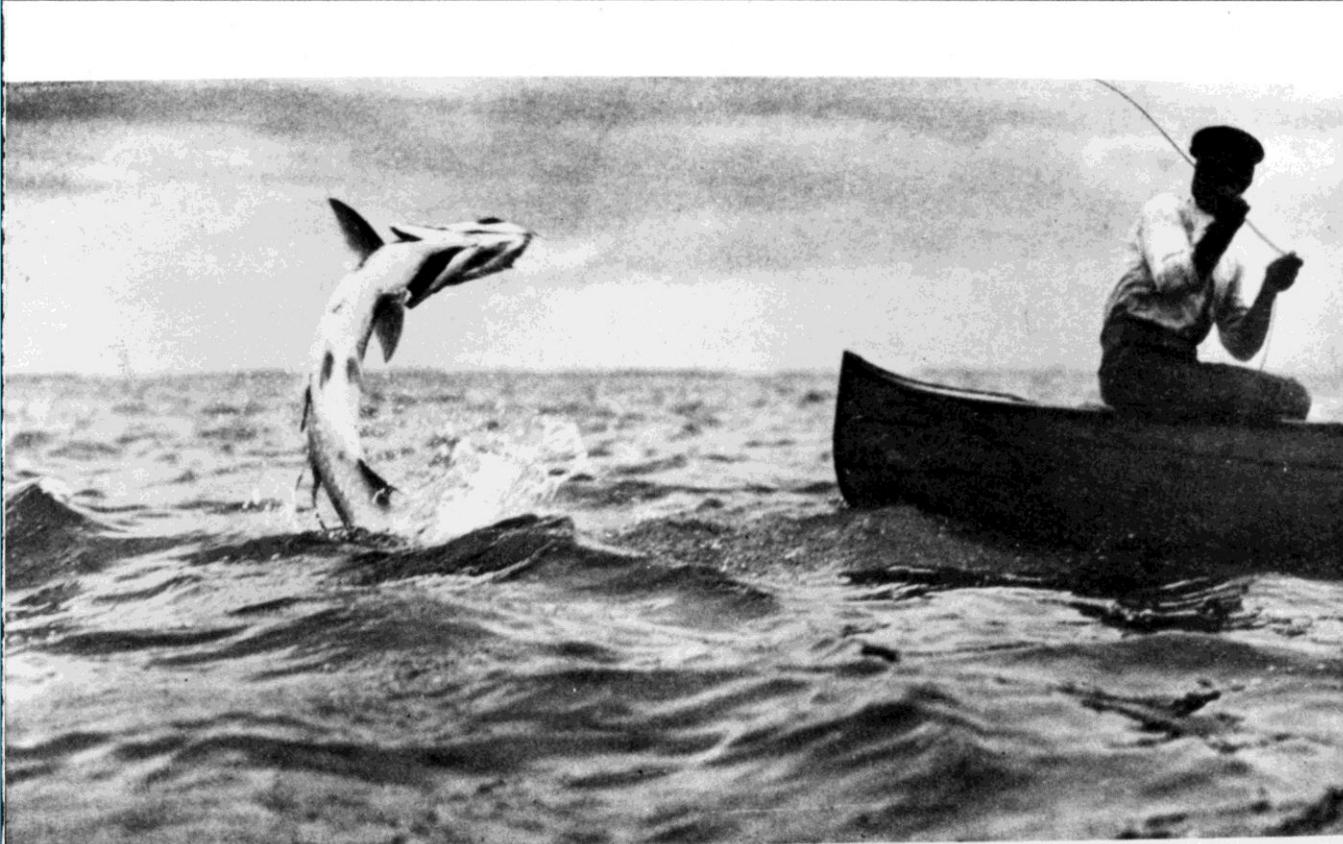
# Tarpon Postcard



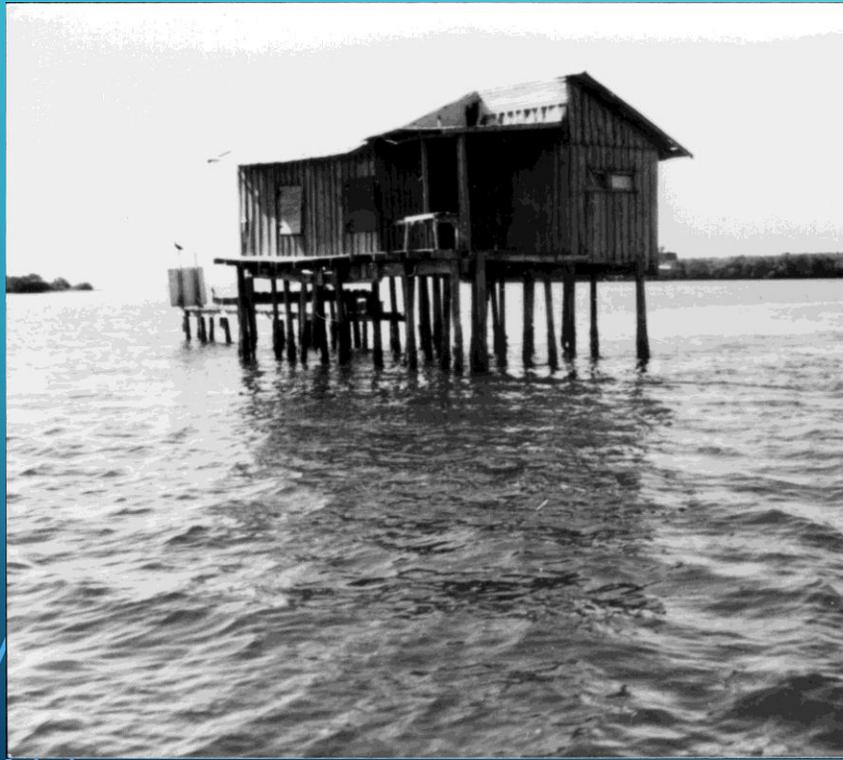


Fishermen's camp - Blind Pass. - Sanibel Island





THE CAPTAIN GOT THE FIRST STRIKE.







GE

ROLLED ME WELL OUT AND BURIED ME BENEATH  
THE SURFACE OF THE WATER.



FISHING AT MUNICIPAL DOCK  
PUNTA GORDA, FLA.

