As of June 22, 2014

Topic: Chesapeake Bay & Coastal Virginia Submerged Aquatic Vegetation (SAV) & Fish Species Habitats (Prep for Govie RFP Response Proposals)

For: A Team briefing (Café Twin Virtual Team, LinkedIn.Com Group)

Order Fishing Interests

Geography Spawning Ground Habitat

Definition: An Anadromous Fish: **An anadromous fish, born in fresh water,** spends most of its life in the sea and returns to fresh water to spawn. <u>Salmon,</u> smelt, shad, striped bass, and <u>sturgeon</u> are common examples

Pelagic fish: **Pelagic fish** (Wikipedia) live in the <u>pelagic zone</u> of ocean or lake waters - being neither close to the bottom nor near the shore - in contrast with <u>demersal fish</u>, which do live on or near the bottom, and <u>reef fish</u>, which are associated with <u>coral reefs</u>. [1]

Marine pelagic fish can be divided into pelagic coastal fish and oceanic pelagic fish. Coastal fish inhabit the relatively shallow and sunlit waters above the continental shelf, while oceanic fish (which may well also swim inshore) inhabit the vast and deep waters beyond the continental shelf.

Topic: Significant Fish Species & Aquatic Habitat SAV Husbandry at Lower CB Coastal Virginia

Source Book: Fishes of Chesapeake Bay

By Edward O. Murdy, Ray S. Birdsong, John A. Musick (Smithsonian Institute Press, 1997)

Species Accounts by Order & Family

01. Sandbar Shark (Page 30)

Order: Carcharhiniformes (page 25-36)

11 species listed, Sandbar Shark used for human consumption most often in the past

Fishing Interests: Longlines mainly. Most important commercial shark specie in east coast USA since 1940s. 20% or less of former abundance

Geography: CB West Atlantic Massachusetts

to Brazil

Spawning Ground

Habitat:

2. Cownose Ray ({Page: 51)

Family: Rhinopteridae

Rays & Mantas (Order Myliobatiformes)

Page 42-52)

Fishing Interests; None in CB region. This group is considered predators for the shell fish aquaculture industry sometimes. Requires monitoring along

with Sharks as species in the top of the marine food chain.

Geography Spawning Grounds Habitat

3. Atlantic Sturgeon (Page 53)

Order Acipenseriformes

Family: Acipenseridae (Sturgeons) (Page 53-55)

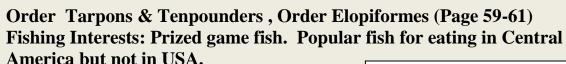
Fishing Interests Endangered species by U.S. Fish & Wildlife Service. Some populations are showing signs of recovery. Shortnose specie still endangered. Reintroduction by hatchery on both species.





Geography Spawning Ground Habitat

4. Tarpons Family Megalopidae



Geography: Virginia and South Spawning Ground Habitat



5. American Eel (Page 62)

Order Eels Anguilliformes (Page 52-64) Family Anguilla rostrata Fishing Interests Use fyke nets& eel pots. Support extensive fishery Dockside value given in 1990 \$1.60/lb. average. Export to Europe & East Asia 1981 Commercial Catch of 54 K kg (700 K Lb.) bot MD & VA. 1990 Maryland 54 K Kg (MD, 118 K Lbs.) & 136 K Kg (VA 299 K lbs)

Geography: Residents of tributaries of CB Spawning Ground Rivers in CB Habitat



Family: Engrailidas (Anchova mitchilli) Order: Anchovies & Herrings (Page 65-69)



Fishing Interests considerable indirect value as a forage resource for other fish & marine animals

Geography abundance throughout the CB upper and lower.

Spawning Ground

Habitat



7. American Shad (page 74)

Family: Alosa sapidissima (Shads classified with the Herrings) pg 74-78

Fishing Interests: A valued fish since the colonial era. A remnant Native American tribe who still live along the Potomac depends on Shad migration annually up the river as an anadromous fish. Valued for meat and roe. Geography CB tributary rivers including Potomac River

Spawning Ground

Habitat



8. Golden Shiner (Pg. 86)

Order Family Carps & Minnows (Pg. 83-90) family Notemigonus crysoleucas Fishing Interests baitfish for bass & catfish. Farmed for that purpose.

Geography common and abundant in all tributaries of CB **Spawning Ground** Habitat

Chesapeake Bay Program A Marinded Participally

8. Blue Catfish (Pg. 93)

Order Catfish Siluriformes Family Ictalurus furcatus (Blue), Ameriurus catus (White)

Fishing Interests: Blue is highly prized due to size & meat .White has significant commercial interest including aquaculture.

Geography Spawning Ground Habitat

9. Chain pickerel (Pg 105)

Order Family Esox niger Fishing Interests

Geography Spawning Ground Habitat

10.Pollock (Pg 111)

Order Cods & Hakes Gadiformes (Pg 110-115) Family Pollachius virens Fishing Interests Considerable value for commercial fishing in New England. Not abundant in CB.

Geography Spawning Ground Habitat

11.Butterfish (pg 154)

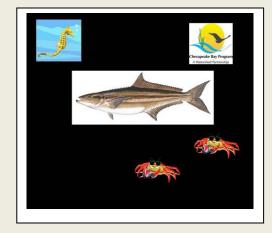
Order Family Stromateidae (Pg 153-155) Peprilus triacanthus

Fishing Interests CB catch was much larger in 1920. Now minor in importance due to declined numbers April-May & September-October peak.

Geography Spawning Ground Habitat

12. Cobia (Pg 176)

Order Family Rachycentridae



Fishing Interests: Highly prized by angler. Also caught commercially. Use bait fish. Can grow to 100 Lbs +.

Geography Spawning Ground Habitat

13.Atlantic Mackerel (Pg 180)

Order Family Scomber scombrus Fishing Interests Pelagic fish. Considerable commercial interest elsewhere but not at CB region. Found off shore mostly for sport fishermen in season.

Geography Spawning Ground Habitat



14.Spotted Sea Trout (Pg 200)

Order Family Cynosscion nebulous

Fishing Interests 2^{nd} in rank by the pound in commercial fishing interest east coast USA. Virginia catch declined from 760 K lbs in 1940s to 19 K lbs recently.

Geography Spawning Ground Habitat

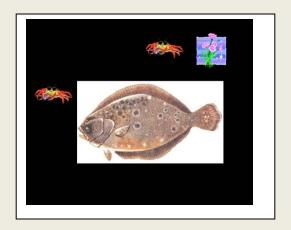




Order Family Morone saxatilis

Fishing Interests Among the most important commercial & sports fishing interests. Drastic decline recently. Aquaculture important for Virginia. Eel used as bait fish.

Geography Spawning Ground Habitat



16. Summer Flounder (Pg 277)

Order Flat Fishes Pleuronectiformes (Pg 269-280) Paralichthys dentatus Fishing Interests Important commercially in CB region. Important in Virginia and Maryland for sports fishing. Increased in harvest from 48 K in 1990 to 5.5 million Lb. Aquaculture important.

Geography Spawning Ground Habitat

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