

# Who's that critter?

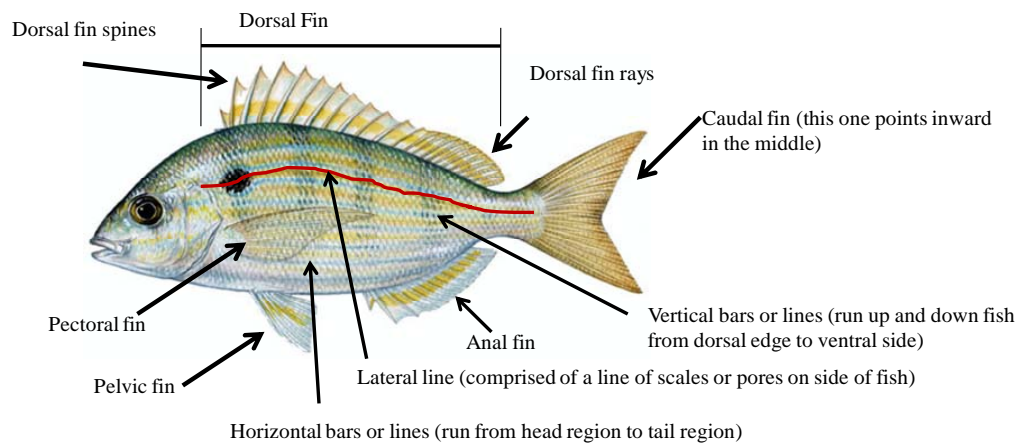
## Identifying Fish and Invertebrates from Intertidal Oyster Reef Habitats

A guide for volunteers  
and students

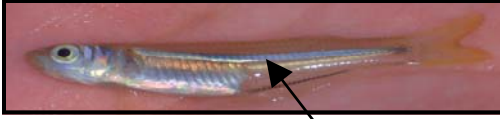
Created by  
South Carolina  
Department of Natural Resources  
with funding from



Fish characteristics and terminology to be aware of in using this fish I.D. booklet



**Atlantic Silverside**  
*Menidia menidia*



**Notable silver stripe down the side of fish helps distinguish this fish**

- Similar to anchovy except mouth is much smaller on the Silverside and is located in the middle of the head.
- Pointy snout

**Anchovy**  
*Anchoa sp.*



**Stubbier snout and larger mouth than Silverside**

- Dorsal fin originates over the origin of the anal fin
- Sides with silvery lateral band scarcely as wide as the pupil of eye.

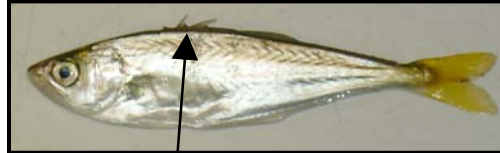
**American Silver Perch**  
*Bairdiella chrysoura*



**Dark lateral line**

- Silvery
- May have faint dark stripes running horizontally on the body
- Juveniles will have peach colored fins (as pictured above)

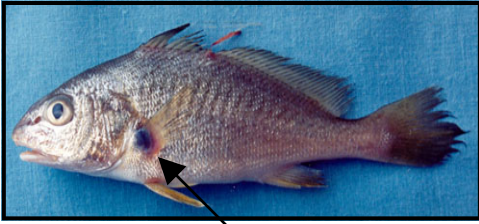
**Leatherjacket**  
*Oligoplites saurus*



**Dorsal spines contain a small amount of toxin so handle with care.**

- Often have blue, green, and or yellow coloring on back
- Lateral line nearly straight.
- Fins, especially anal and dorsal, are yellow.

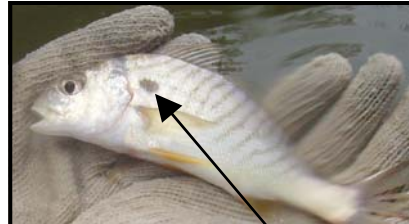
**Atlantic Croaker**  
*Micropogonias undulatus*



**Spot at base of pectoral fin**

- Named for a croaking sound
- Faint vertical stripes
- Strong lateral line
- Small chin barbells
- Tail does not have fork

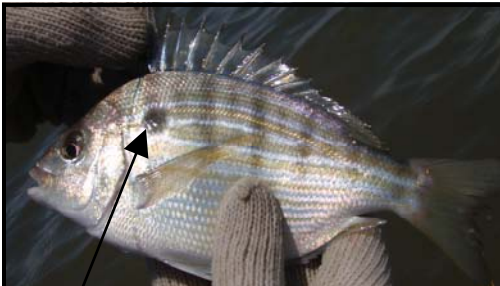
**Spot**  
*Leiostomus xanthurus*



**Spot below lateral line but above pectoral fin**

- Narrow diagonal dark lines on upper body
- Split dorsal fin
- Forked caudal fin
- Similar to Atlantic croaker, pinfish

**Pin Fish**  
*Lagodon rhomboides*



**Dark spot on shoulder centered on lateral line**

- Horizontal blue and yellow stripes
- Similar to: Atlantic croaker,

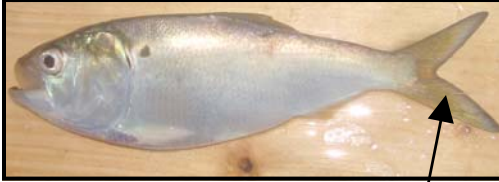
**Pigfish**  
*Orthopristis chrysoptera*



**Stripes on a pigfish usually appear to be a series of dots as opposed to the more complete stripes on the pin fish**

- Coloring can include array of blues, greens, yellows, with bronze-orange spots
- Has less spines on anal fin than the pinfish

**Atlantic Menhaden**  
*Brevoortia tyrannus*



**Deeply forked tail**

- Dark spot behind gill
- Silvery reflective scales and come off fish easily
- Fins pale yellow
- Dark blue-green back
- No thread on dorsal fin

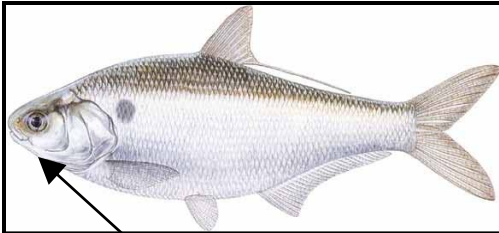
**Atlantic Threadherring**  
*Opisthonema oglinum*



**Dark spot behind gills**

- Thread stemming from dorsal fin
- Yellow caudal fin
- Deeply forked tail
- Dark stripes on back

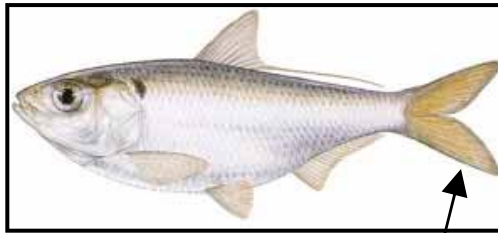
**Gizzard Shad**  
*Dorosoma cepedianum*



**Upper jaw projects past lower jaw**

- Silvery to brassy, with 6-8 dark stripes along the upper side
- If you run your finger along bottom jaw and your fingernail catches upper jaw causing mouth to open, it's a gizzard shad

**Threadfin Shad**  
*Dorosoma petenense*



**Distinct yellow anal fin**

- Similar to Gizzard Shad, but with projected upper jaw and fewer anal fin rays.
- Yellow anal fin can have lead people from certain regions to refer to them as "Yellowtails"
- Lower jaw protrudes further than upper jaw

**Lady Fish**  
*Elops saurus*



**Large mouth; when closed extends beyond the eye**

- Silvery overall with bluish reflections on upper body
- Single dorsal fin begins above a point slightly behind the origin of the pelvic fin

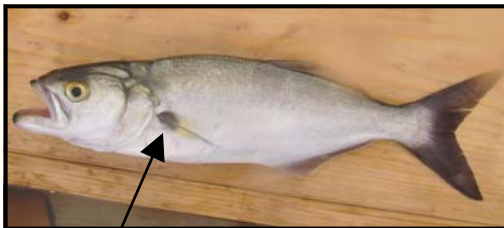
**Kingfish (Whiting)**  
*Menticirrhus sp.*



**One distinct chin barbell**

- Grayish-brown dorsal side with silvery sides
- 7-8 diagonal dusky bands or

**Bluefish**  
*Pomatomus saltatrix*



**The only obvious markings are dark areas at the base of the pectoral fins.**

- Body is compressed, and back is greenish-blue
- Belly is silvery and head is large.

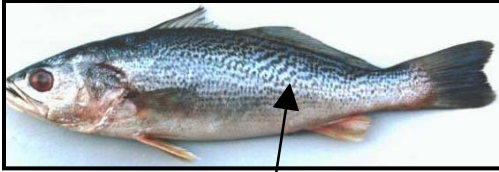
**Mullet**  
*Mugil sp.*



**Blue color present at base of pectoral fins**

- No scales on fins
- Long torpedo-like body
- Dark stripes composed of numerous spots
- White mullet do not have noticeable stripes, but striped mullet are more common
- Forked tail

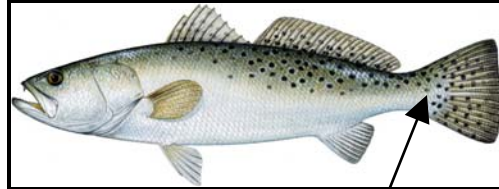
**Weakfish**  
*Cynoscion regalis*



**Undefined spots; smaller and less obvious than those of a speckled trout**

- Commonly mistaken for a spotted sea trout.
- Dark olive and bluish color

**Spotted Sea Trout**  
*Cynoscion nebulosus*



**Dark, distinct round spots on back that continue onto dorsal and caudal fins**

- Dark grey and green coloring on back fades to silver on stomach
- Often have prominent teeth at

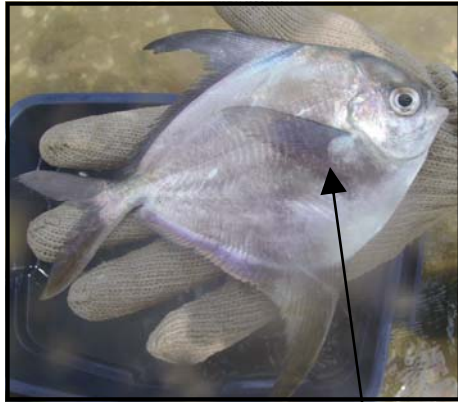
**Red Drum**  
*Sciaenops ocellatus*



**Conspicuous black spot at the caudal peduncle (fleshy part of the fin)**

- May have multiple dots running along dorsal side
- No chin barbells
- Iridescent silvery gray, copper, or reddish coloration

**Harvest Fish**  
*Peprilus alepidotus*



**Pectoral fin longer on Harvest-fish than on Permit**

- Tall, thin bodies
- Elongated dorsal and anal fins

**Permit**  
*Trachinotus falcatus*



**Permit often have an orange/yellow patch in front of anal fin**

- Tall, thin bodies
- Elongated dorsal and anal fins

**Lookdown**  
*Selene vomer*



**The steep slope of the front of the head makes them distinct**

- Body extremely compressed and deep, plate-like
- Dramatically elongated dorsal and anal fins and small pelvis fins

**Atlantic Bumper**  
*Chloroscombrus chrysurus*

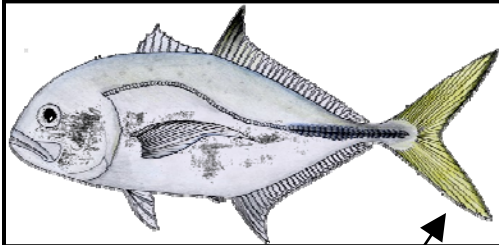


**Black saddle marking at the beginning of the caudal fin**

- Silvery to golden body with yellow/gold fins
- Body shows more arch on ventral side of the fish giving it the illusion of a “big belly”



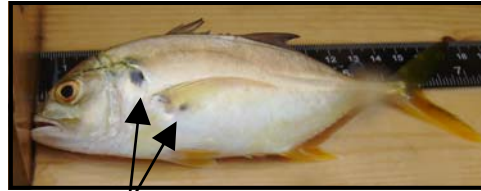
**Horse-eye Jack**  
*Caranx latus*



**Yellow caudal fin**

- Similar to the Crevalle jack but the front of the head is less steep
- Black blotch at the opercle is smaller and less defined

**Crevalle Jack**  
*Caranx Hippos*



**Large oval black spot on the pectoral fins (unlike the horse-eye jack) and one on gill cover**

- Body greenish to bluish above and silvery white below
- May be mistaken for an Atlantic Bumper, but this fish's face is much rounder and the body is thicker.

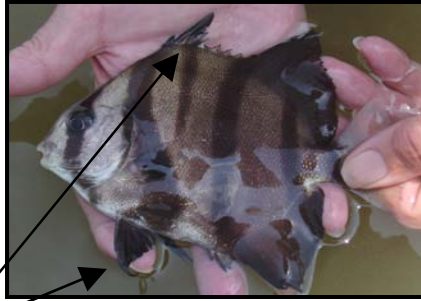
**Atlantic Tripletail**  
*Lobotes surnamensis*



**Long dorsal and anal fins give the appearance of three tails**

- Very distinct coloring: body color yellow-brown to dark brown

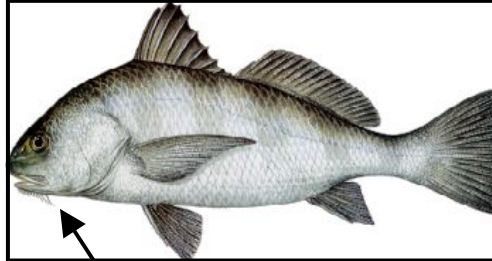
**Atlantic Spadefish**  
*Chaetodipterus faber*



**Long frontal lobes help to distinguish spadefish**

- Silvery to tan with broad dark grey or brown vertical strips
- Short, disk-shaped body
- Blunt snout.

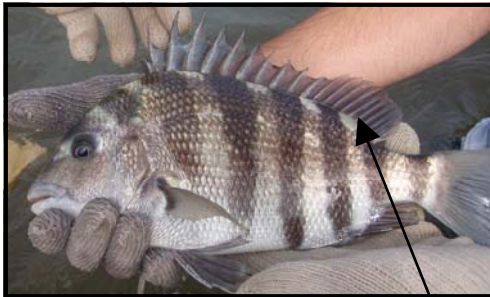
**Black Drum**  
*Pogonias cromis*



**Prominent chin barbels**

- Distinct black bands running vertically down body
- Second spine on dorsal fin much longer than first
- All drum species know for distinct croaking sound

**Sheepshead**  
*Archosargus probatocephalus*



**Dorsal fin continuous with 12 distinct spines**

- Black bars on body
- Profile of head is steep
- This fish has a lot of sharp spines, handle with care

**Summer Flounder**  
*Paralichthys dentatus*



**Distinct oscillating spots distinguish spotted flounder from Southern**

- Flat, brownish, speckled fish
- Both eyes on left side of the head

**Southern Flounder**  
*Paralichthys lethostigma*



- Flat, brownish, speckled fish
- Both eyes on left side of the head
- Looks very similar to a Summer Flounder
- More commonly found than Summer Flounder
- Brownish, mottled or speckled. May have spots but they are not oscillated.

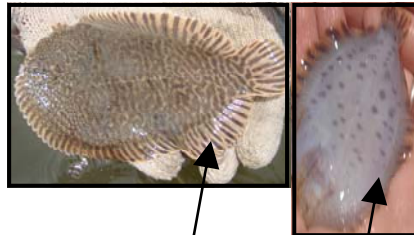
**Blackcheek Tonguefish**  
*Symphurus plagiosa*



**Large dark spot on operculum**

- Often mistaken for juvenile flounder
- No obvious tail

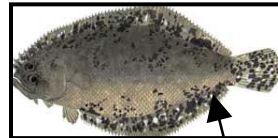
**Hogchoker**  
*Trinectes maculatus*



**Zebra stripe pattern; Blindside frequently spotted**

- Small flatfish with eyes on right side of body
- Round body
- No pectoral fin

**Bay Whiff**  
*Citharichthys spilopterus*



**Spots small and obscure, if present at all.**

- Flatfish with eyes on left side of body
- Blind side has no spots
- Lateral line is straight

**Naked Goby**  
*Gobiosoma boscii*



- This fish has no scales
- Broad, regular, dark bars behind head.

**Darter Goby**  
*Ctenogobius boleosoma*



- Blackish oval blotch above base of pectoral fin
- Large black spot on caudal fin
- Less defined blotches along the body

**Striped Blenny**  
*Chasmodes bosquianus*



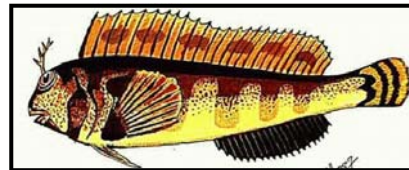
- Soft dorsal fins continuous with no notch Brown with dark wavy lines and often some molting or spotting
- Pointed head with prominent lip flaps

**Oyster Blenny**  
*Hypleurochilus aequipinnis*



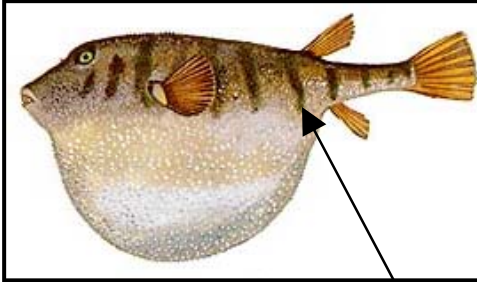
- Dark brown spots grouped in about 5 square-ish blotches along upper part of body
- Head with orange-ish spots

**Feather Blenny**  
*Hypsoblennius hentzi*



- Yellow/brown above, white below with dark brown spots
- Five rather obscure, oblique dark bars on body.

**Northern Pufferfish**  
*Sphoeroides maculatus*



**Row of 6-7 vertically elongate blackish gray areas on the side**

- Dark olive-gray above with many tiny black spots
- Black bar between eyes
- Whitish below with no markings

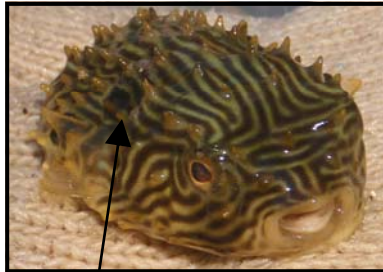
**Bandtail Puffer**  
*Sphoeroides spengleri*



**Row of large brownish black spots along lower part of body from chin to caudal-fin base**

- Usually dark brown above, pale tan on lower side and whitish below.
- Many tan fleshy tabs towards rear on the body

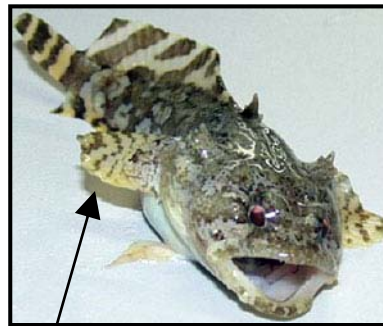
**Striped Burrfish**  
*Chilomycterus schoepfi*



**Most have large black patches above pectoral fins**

- Yellow-brown, with dark stripes and several dark patches
- When not inflated, have lots of excess skin

**Oyster Toadfish**  
*Opsanus tau*



**Fins have bright yellow borders**

- Body brownish to magenta with many tan to yellow lines across head
- Body has lichen-like patches

**American Eel**  
*Anguilla rostrata*



- Greenish brown, sometimes yellow
- Lower jaw longer than upper jaw
- All fins are continuous

**Speckled Worm Eel**  
*Myrophis punctatus*



**Snout looks pointed; v-shaped**

- Upper body speckled with easily seen pepper-like spots

**Inshore Lizardfish**  
*Synodus foetens*



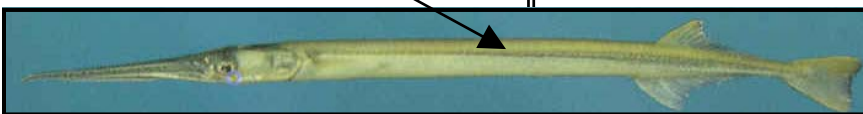
**About 8 diamond shaped marks along side**

- Anal fin base is same length or longer than dorsal fin base

**Atlantic Needlefish**  
*Strongylura marina*

- Caudal fin bluish
- Dorsal and anal fins toward back of long sleek body

**Long silver/blue stripe down each side**

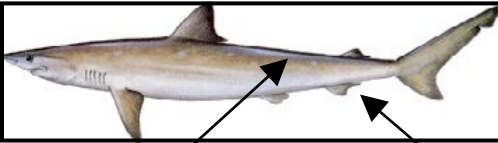


**Pipefish**  
*Syngnathus sp.*



- Olive-brown, mottled
- Bands indistinct or absent.
- This is a type of Seahorse—so its face looks similar.

**Atlantic Sharpnose Shark**  
*Rhizoprionodon terraenovae*



**2nd dorsal fin behind last anal**

- Pointed snout
- Dark edged fins

**Bonnethead Shark**  
*Sphyrna tiburo*



**Head rounded like a bonnet**

- Similar to a Hammerhead Shark, however its head is rounded not rectangular
- Should be no longer than a meter in length



Tip:  
If you lay sharks, skates, and rays on their backs like the picture in the bottom left-hand corner, the animal will relax thus allowing you to have maximum control.



**Stingrays**  
*Dasyatis* sp.



**Pointed snout**

- Disk with very rounded outer corners and rear edges
- Low dorsal and ventral fin folds on tail

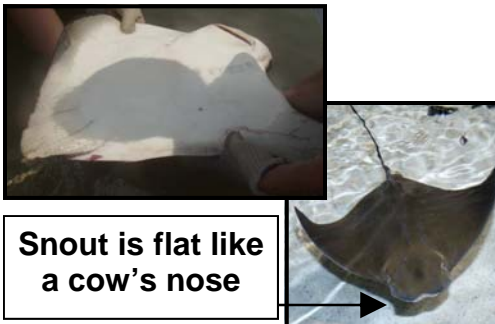
**Smooth Butterfly Ray**  
*Gymnura micrura*



**Tail very short with no spine**

- Width > 1.5 times length
- Grey, brown, greenish, or purplish above with small pale or dark spots
- White below with grey edges

**Cownose Ray**  
*Rhinoptera bonasus*



**Snout is flat like a cow's nose**

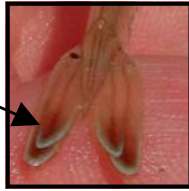
- Head has concave anterior depression.
- Pectoral fin deeply notched in the middle forming the two lobes that join at the base.
- Width slightly >1.5 times length



**White Shrimp**  
*Litopenaeus setiferus*

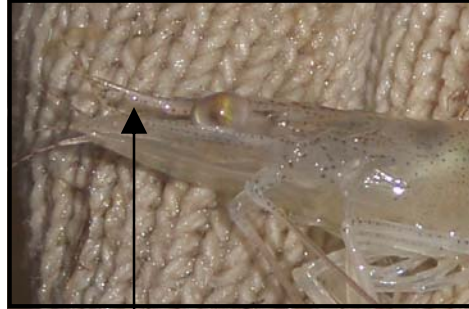


Tail has bright yellow/green margins



- Placed side by side, fresh white shrimp appear lighter in body color than brown
- Antennae are often twice the length of its body

**Brown Shrimp**  
*Farfantepenaeus aztecus*



Rostrum (poker on the front of the head) is slightly shorter than the blades, which protrude from the mouth

- Generally larger than grass shrimp

**Grass Shrimp**  
*Palaemonetes sp.*



- Extremely small.
- Rostrum is jagged
- Very common!

**Inshore Squid**  
*Loligo sp.*



- Changes color in your hand.
- Has protruding tentacles on one end of its body.
- Has speckles that also change color.
- Can be distinguished from an octopus by its long mantle—the tubular section on the uppermost part of its body.

**Blue Crab**  
*Callinectes sapidus/similis*



**Pictures to left differentiate male (top) and female (bottom)**

- *C. sapidus* has four bumps between the eye stalks.; *C. similis* (less common) has six bumps.
- Females typically have red highlights along the legs.

**Stone Crab**  
*Menippe mercenaria*



- Brownish red with gray spots and a whitish underside.
- Large, unequally-sized claws (chela) with black tips.

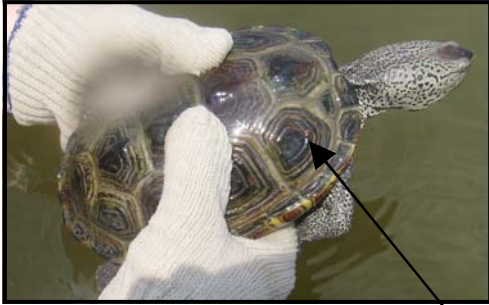
**Horseshoe Crab**  
*Limulus polyphemus*



**Male pedipalps resemble boxing gloves (females' are scissor-like)**

- Hard semicircular shell, hinged, with long rigid tail

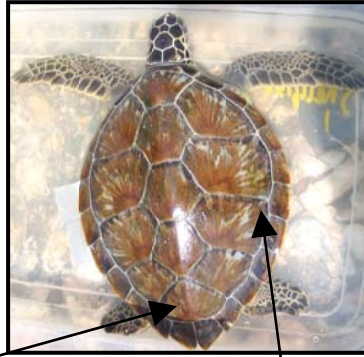
**Diamondback Terrapin**  
*Malaclemys terrapin*



**Diamond pattern on shell**

- Does not have flippers
- Can retreat inside its shell, unlike sea turtles
- Skin is grayish with black speckles shape

**Green Sea Turtle**  
*Chelonia mydas*



**5 central scutes and 4 on each side**

- Long flippers that cannot retreat into its shell
- Two prefrontal scales behind the head
- The skin tone and pattern is green whereas a Loggerhead Sea Turtle is brown.