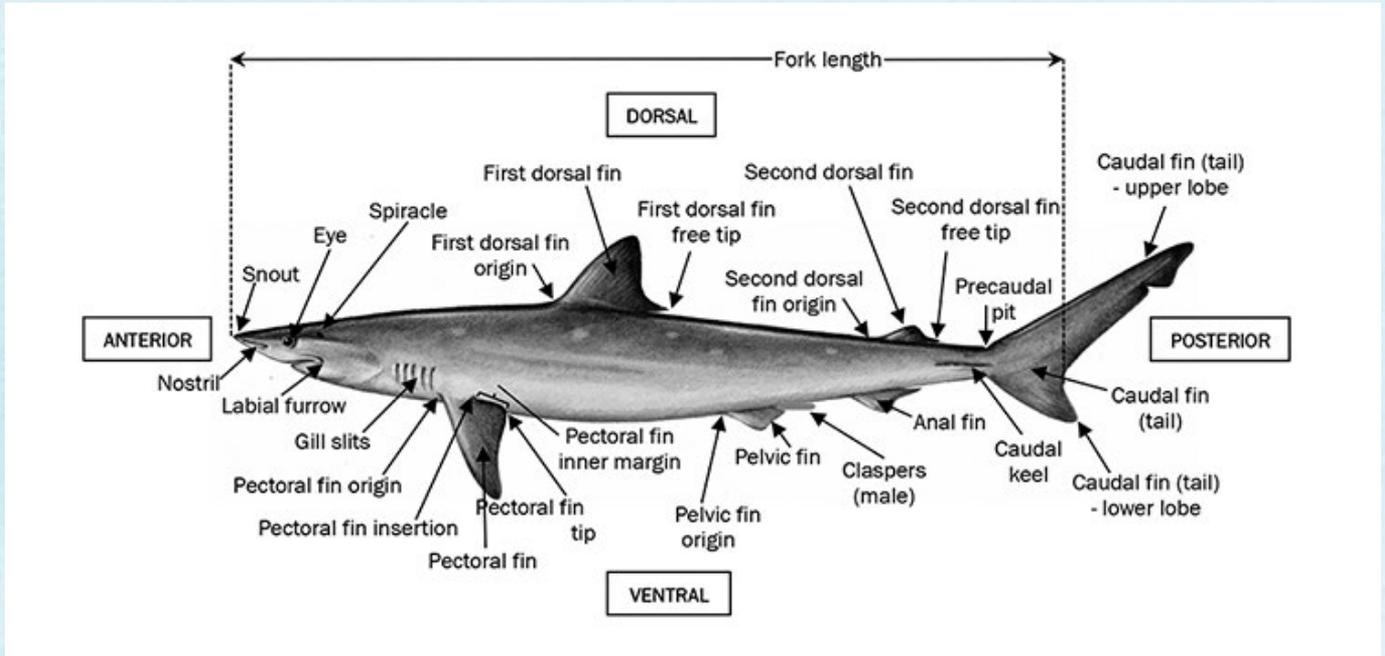


# Sharks, Rays and Skates

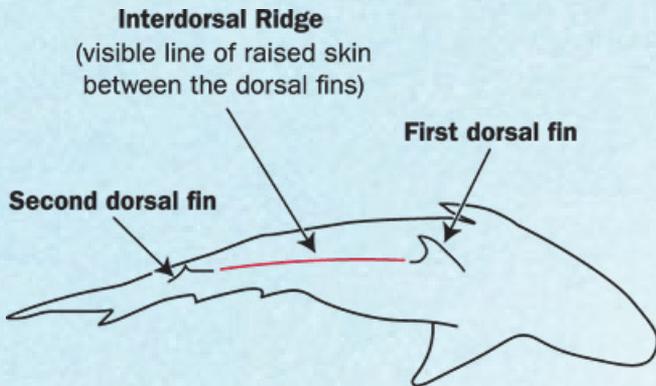
## Shark Anatomy

These diagrams show important anatomical characteristics of sharks.



Top view of shark

Bottom view of shark

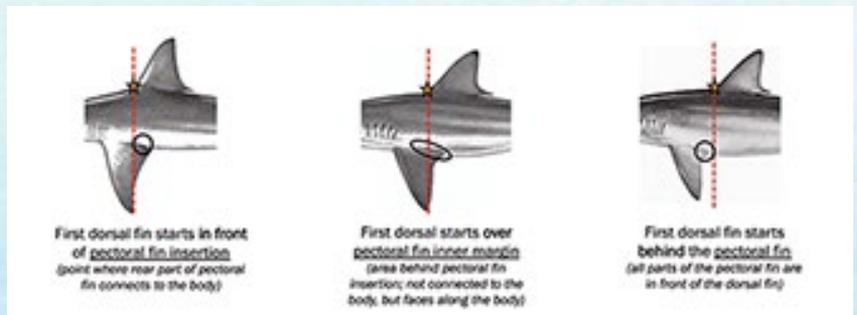


### Snout Shapes

Bluntly rounded    Moderately rounded    Sharply rounded



**Spiracle:** Opening behind each eye that draws in water to aid in breathing while lying on the bottom.



## Blacknose Shark

*Carcharhinus acronotus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

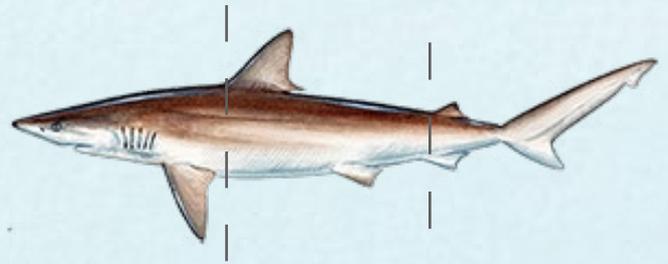
- Black or dusky blotch on snout tip
- Back is pale olive-gray, fading to a whitish belly
- First dorsal fin starts immediately behind the pectoral fin
- Second dorsal fin starts before middle of anal fin
- No interdorsal ridge

**Similar Species:** Atlantic sharpnose shark, *R. terraenovae* (lacks dark snout tip)

**Size:** Up to 5 feet

**Habitat:** Coastal waters; common in bays and lagoons

**Notes:** Feed mostly on small fishes and invertebrates



## Atlantic Sharpnose Shark

*Rhizoprionodon terraenovae*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

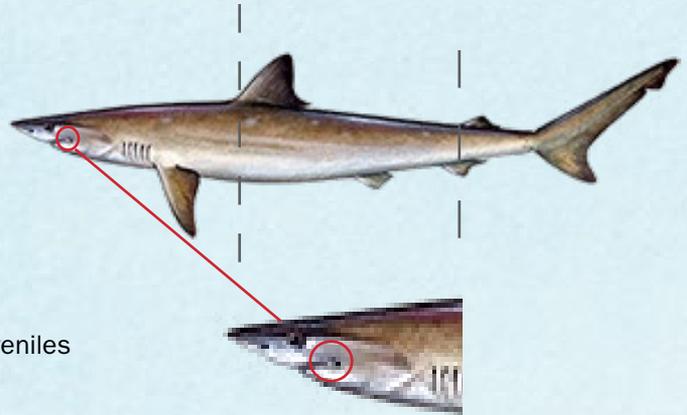
- Body is slender, brown to olive-gray on back, fading to a whitish belly
- Snout is long and sharply rounded
- Very long upper labial furrow (groove around the lips)
- Dorsal and caudal fins with black edges, especially in juveniles
- First dorsal fin starts well behind pectoral fin
- Second dorsal fin starts over the middle of the anal fin
- Adults may have small white spots on sides
- No interdorsal ridge

**Similar Species:** Blacknose shark, *C. acronotus* (has dark snout tip)

**Habitat:** Coastal waters; can be found near the surf zone; common in bays and estuaries; Adults also found offshore

**Size:** Up to 4 feet

**Notes:** Feed on small fishes and invertebrates



## Blacktip Shark

*Carcharhinus limbatus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

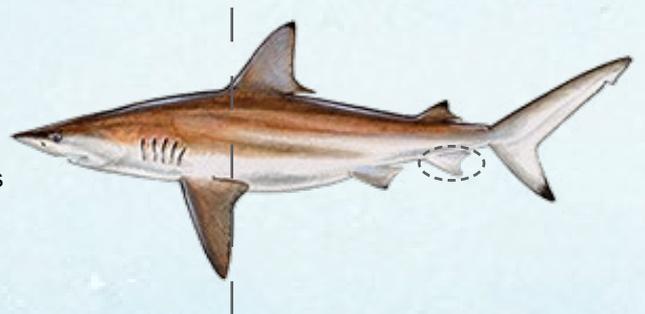
- Back is dark bluish-gray (juveniles more pale) fading to a whitish belly
- Anal fin lacks black tip (in adults); dorsal fins, pectoral fins, anal fin and caudal fin lower lobe are black-tipped in juveniles (fades with growth)
- First dorsal fin starts above pectoral fin inner margin
- Long snout that appears nearly V-shaped from below
- No interdorsal ridge

**Similar Species:** Spinner shark, *C. brevipinna* (first dorsal fin starts behind the pectoral fin; anal fin is black-tipped)

**Habitat:** Coastal to offshore waters

**Size:** Up to 6.5 feet

**Notes:** One of the most common shark species in Florida coastal waters



## Spinner Shark

*Carcharhinus brevipinna*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

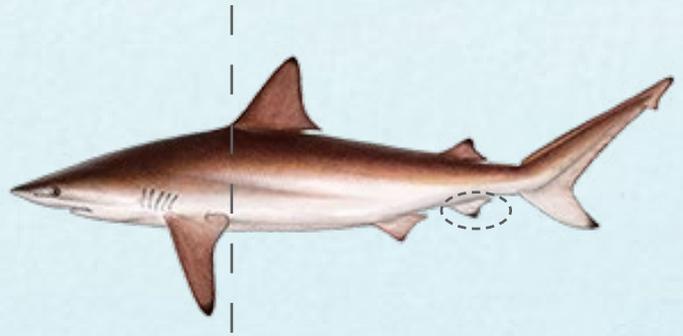
- Back is gray-bronze, fading to a white belly
- Snout pointed with a length equal to or longer than mouth width
- Anal fin with black tip
- Dorsal fins, pectoral fins and caudal fin lower lobe also black-tipped
- First dorsal fin starts behind pectoral fin
- No interdorsal ridge

**Similar Species:** Blacktip shark, *C. limbatus* (first dorsal fin begins over the pectoral fin inner margin; anal fin does not have a black tip)

**Habitat:** Coastal to offshore waters

**Size:** Up to 8 or 9 feet

**Notes:** The spinner shark's name is derived from its habit of leaping out of the water and spinning while in the air (other shark species are known to leap as well)



## Finetooth Shark

*Carcharhinus isodon*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

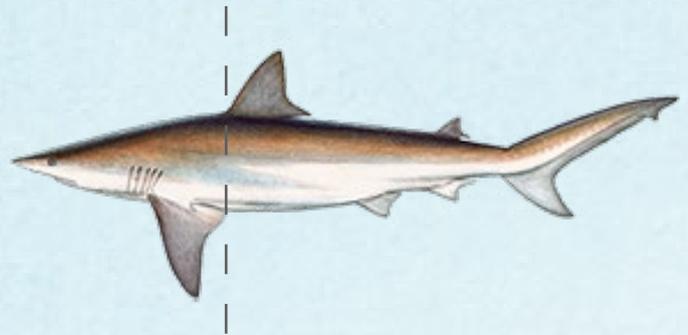
- Body slender with long gill slits
- Back is gray-blue, fading to a white belly
- Teeth are finely pointed and smooth, similar in both jaws
- Fins are unmarked (no spots, blotches or black edges or tips)
- No interdorsal ridge

**Similar Species:** Blacktip shark, *C. limbatus* (has black tips on fins); spinner shark, *C. brevipinna* (has black tips on fins); and Atlantic sharpnose shark, *R. terraenovae* (spots on side and long upper labial furrows)

**Habitat:** Coastal waters

**Size:** Up to 4 or 5 feet

**Notes:** Feed on small fishes and squid



## Lemon Shark

*Negaprion brevirostris*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

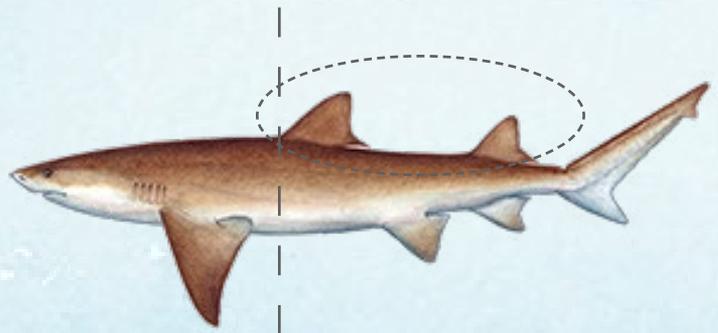
- Snout bluntly rounded, shorter than width of mouth
- Back is yellowish-green, brown or olive-gray, fading to a white belly
- First and second dorsal fins are nearly equal in size
- No interdorsal ridge

**Similar Species:** Bull shark, *C. leucas* (first and second dorsal fins are unequal in size); nurse shark, *G. cirratum* (has nasal barbels)

**Habitat:** Coastal waters, including nearshore and in estuaries

**Size:** Up to 10.5 feet

**Notes:** Feeds on fishes, invertebrates, small sharks, rays and occasionally on sea birds; may enter freshwater



## Bull Shark

*Carcharhinus leucas*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

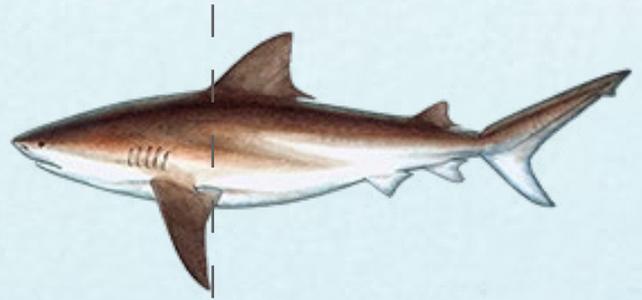
- Back is pale to dark gray, fading to a white belly
- Snout bluntly rounded, much shorter than width of mouth
- Large triangular first dorsal fin; begins over or just behind pectoral fin insertion
- No interdorsal ridge

**Similar Species:** Lemon shark, *N. brevirostris* (first and second dorsal fins nearly equal in size); Caribbean reef shark, *C. perezii* (has interdorsal ridge); and sandbar shark, *C. plumbeus* (first dorsal fin starts before pectoral fin insertion)

**Habitat:** Estuarine, nearshore and offshore waters

**Size:** Up to 9 or 10 feet

**Notes:** One of the few shark species that may inhabit freshwater, sometimes venturing hundreds of miles inland via coastal river systems; more aggressive than most shark species



## Blue Shark

*Prionace glauca*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

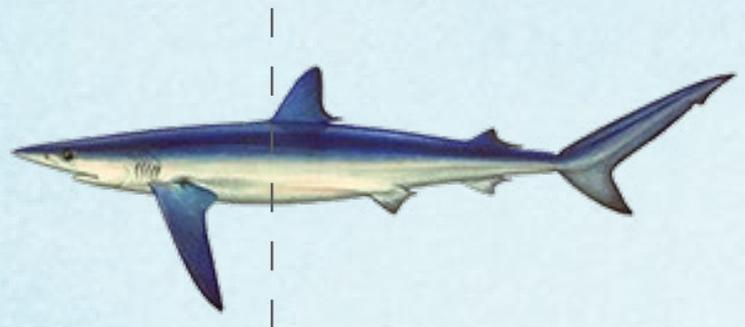
- Body slender with long narrow pectoral fins
- Long sharply rounded snout, longer than width of mouth
- Body color is blue, fading to a white belly
- First dorsal fin starts well behind the pectoral fin
- No interdorsal ridge

**Similar Species:** Shortfin mako, *I. oxyrinchus* (tail in shape of crescent moon)

**Habitat:** Found mostly in offshore oceanic waters

**Size:** Up to 12.5 feet

**Notes:** Feed on a variety of fishes, small sharks and squid



## Caribbean Reef Shark

*Carcharhinus perezii*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

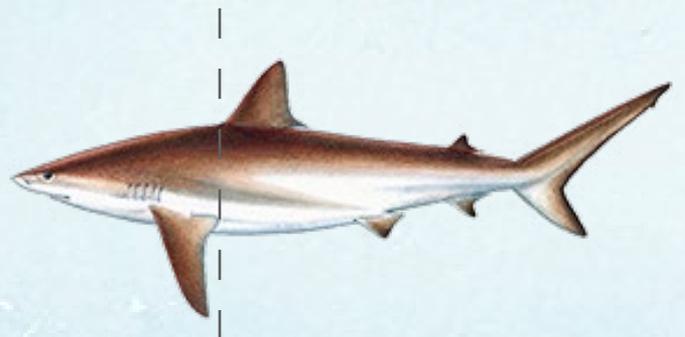
- Back dark gray to gray-brown, fading to a white belly
- Snout short and bluntly rounded
- First dorsal fin starts over pectoral fin free tip
- Fins dusky-colored, with very short free tip on second dorsal fin
- Interdorsal ridge present

**Similar Species:** Dusky shark, *C. obscurus* (longer free tip on second dorsal fin); bull shark, *C. leucas* (no interdorsal ridge); and sandbar shark, *C. plumbeus* (first dorsal fin starts in front of pectoral fin insertion)

**Habitat:** Found near coral reefs in the Caribbean and off South America; rarely found north of the Florida Keys

**Size:** Up to 8 feet

**Notes:** Feed mainly on a variety of fishes



## Dusky Shark

*Carcharhinus obscurus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

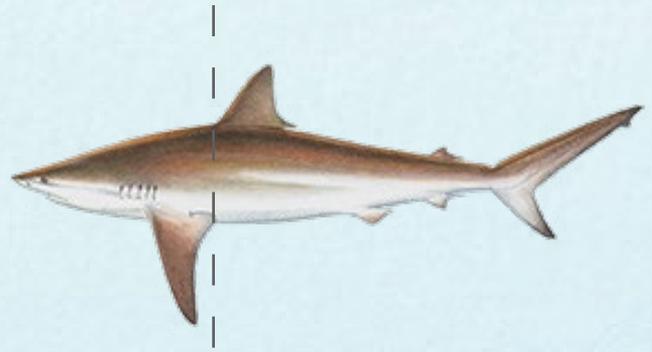
- Back is bronze-gray to blue-gray, fading to a white belly
- Snout moderately rounded, shorter than or equal to mouth width
- Second dorsal fin free tip less than twice as long as fin height
- First dorsal fin starts over the pectoral fin free tip
- Interdorsal ridge present

**Similar Species:** Sandbar shark, *C. plumbeus* (first dorsal fin starts in front of pectoral fin insertion); silky shark, *C. falciformis* (first dorsal fin starts behind pectoral fin free tip; longer second dorsal fin free tip)

**Habitat:** Nearshore and offshore waters; avoid estuaries with low salinities

**Size:** Up to 12 feet

**Notes:** May live up to 40 years; feed on other sharks, fishes and squid



## Sandbar Shark

*Carcharhinus plumbeus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

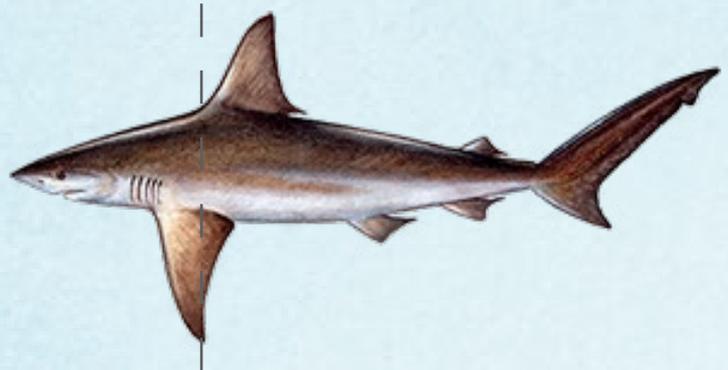
- Snout broadly rounded and short
- First dorsal fin is large and triangular, begins over or in front of pectoral fin insertion
- Back is brown or gray, fading to a white belly
- Interdorsal ridge present

**Similar Species:** Dusky shark, *C. obscurus* (first dorsal starts over pectoral fin free tip); bull shark, *C. leucas* (no interdorsal ridge)

**Habitat:** Coastal and offshore waters; may enter estuaries

**Size:** Up to 8 feet

**Notes:** Mature at about 6 feet in length; feed on fishes and invertebrates



## Tiger Shark

*Galeocerdo cuvier*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

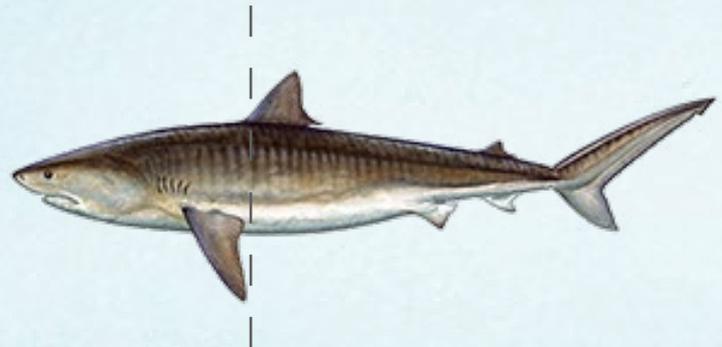
- Snout bluntly rounded, much shorter than mouth width
- Serrated teeth with deep notch on outer margins
- Spiracles present, small
- Adults have tiger-like vertical bars that fade with age
- Juveniles have bluish or green-gray to black backs with dark blotches
- Low interdorsal ridge present

**Similar Species:** Teeth, short snout and markings distinguish this species from all other *Carcharhinids*

**Habitat:** Coastal and offshore waters

**Size:** Up to 15.5 feet

**Notes:** Voracious feeders that will eat just about anything; second only to the great white shark in the number of attacks on humans worldwide



## Sand Tiger Shark

*Carcharias taurus*

**Family** *Odontaspidae*, Sand Tiger Sharks

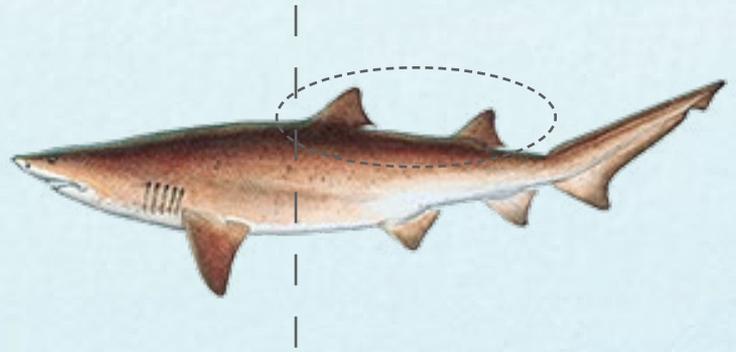
### Description:

- Snout flattened and sharply rounded
- Light brown with irregular dark spots on body
- First dorsal fin starts well behind pectoral fin
- First and second dorsal fins of equal size
- All 5 gill slits are in front of the pectoral fin
- Small eyes and a long mouth that extends behind the eyes
- No interdorsal ridge

**Habitat:** Coastal waters near bays and in deeper waters around reef areas

**Size:** Up to 10 feet

**Notes:** Juveniles are cannibalistic and will feed on siblings while in the womb



## Shortfin Mako Shark

*Isurus oxyrinchus*

**Family** *Lamnidae*, Mackerel Sharks

### Description:

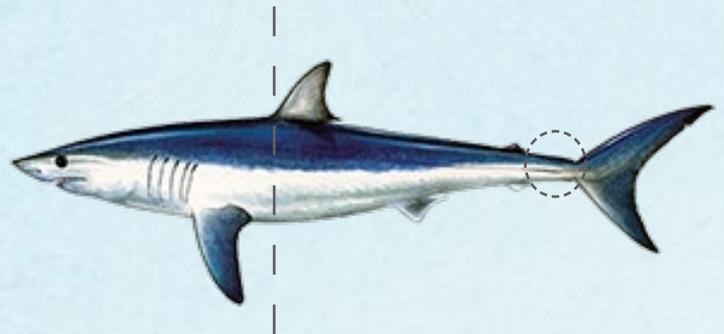
- Lunate tail (shaped like a crescent moon) with lobes of similar size
- Single lateral keel at base of tail
- Back is a deep blue color, fading to a white belly
- Snout is sharply pointed with a white underside
- First dorsal fin starts behind free tip of pectoral fin
- Teeth are long, narrow and recurved with smooth edges
- No interdorsal ridge

**Similar Species:** White shark, *C. carcharias* (teeth are serrated and triangular); and longfin mako, *I. paucus* (area under snout is dusky or blue-black)

**Habitat:** Offshore fish often seen near the surface

**Size:** Up to 12 feet

**Notes:** A strong swimmer that may leap out of the water when hooked; feed on many large fish species



## Common Thresher Shark

*Alopias vulpinus*

**Family** *Alopiidae*, Thresher Sharks

### Description:

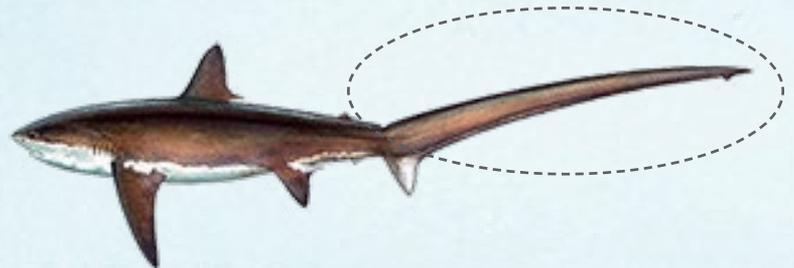
- Huge caudal fin upper lobe, nearly equal to length of body
- White patches extending from abdomen above pectoral fin bases
- No interdorsal ridge

**Similar Species:** Bigeye thresher shark, *A. superciliosus* (has larger eyes and V-groove on top of head)

**Habitat:** Coastal and offshore waters; juveniles found more inshore

**Size:** Up to 20 feet

**Notes:** Long caudal fin is used to herd and stun schools of fish, which make up most of its diet



## Nurse Shark

*Ginglymostoma cirratum*

**Family** *Ginglymostomatidae*, Nurse Sharks

### Description:

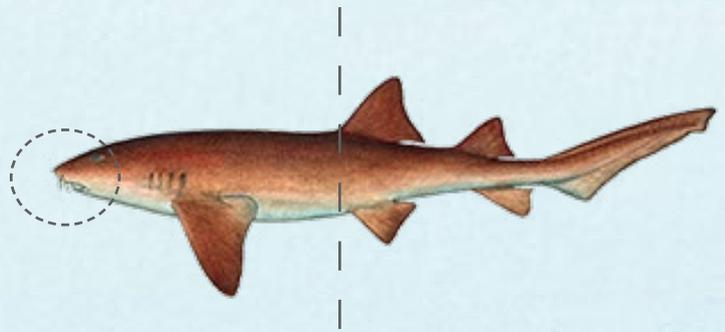
- Very blunt mouth with nasal barbels on each side
- Eyes very small
- Brown to yellow-brown above, lighter below (juveniles often have black spots)
- Broadly rounded dorsal and anal fins
- First and second dorsal fins are similar in size
- First dorsal fin begins well behind pectoral fins
- No distinct lower lobe of caudal fin
- No interdorsal ridge

**Similar Species:** Lemon shark, *N. brevirostris* (lacks nasal barbels)

**Habitat:** Coastal and nearshore waters; often seen lying motionless on the bottom

**Size:** Up to 9 feet

**Notes:** Feed on fishes and bottom-dwelling invertebrates



## Smooth Dogfish (*Dusky Smooth-hound*)

*Mustelus canis*

**Family** *Triakidae*, Smooth-hound Sharks

### Description:

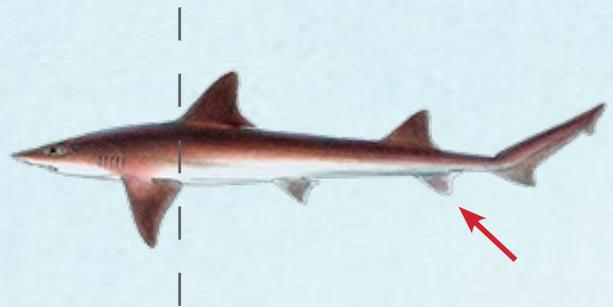
- Grayish-brown color on top, fading to lighter below
- Small, slender shark with two spineless dorsal fins, the second slightly smaller than the first
- Spiracles present
- Caudal fin lower lobe rounded and much shorter than upper lobe
- Upper lobe of caudal fin with deep notch at end
- Interdorsal ridge present

**Similar Species:** Spiny dogfish, *S. acanthias* (lacks anal fin and has one spine in front of each dorsal fin)

**Habitat:** Found inshore in bays, nearshore and offshore near reefs and banks

**Size:** Up to 5 feet

**Notes:** Feed on the bottom, scavenging and preying upon large crustaceans



## Spiny Dogfish

*Squalus acanthias*

**Family** *Squalidae*, Dogfish Sharks

### Description:

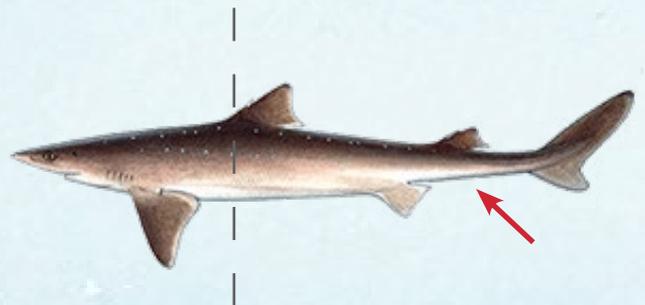
- Blueish-gray back, white spots on sides and a white belly
- Slender body with a long, narrow and pointed snout
- One spine in front of each of the two dorsal fins
- First dorsal fin starts just behind pectoral fin
- Spiracles present
- No anal fin present
- Pale caudal fin with white edge and black blotch on upper lobe
- No interdorsal ridge

**Similar Species:** Smooth dogfish, *M. canis* (has anal fin and lacks dorsal spines)

**Habitat:** Coastal waters on the east coast, usually near the bottom; tolerate brackish water

**Size:** Up to 5 feet

**Notes:** Forage in large schools; feed on fishes and invertebrates



## Scalloped Hammerhead Shark

*Sphyrna lewini*

**Family** Sphyrnidae, Hammerhead Sharks

### Description:

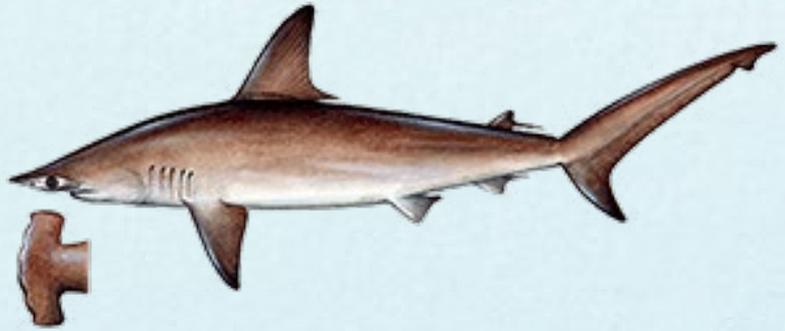
- Head is flattened and extends to hammer-like lobes on each side
- Indentation on front of head at its midpoint
- Teeth have smooth edges
- Back is gray-brown to olive, fading to a white belly
- Underside of pectoral fins tipped with black
- Pelvic fin rear edge nearly straight

**Similar Species:** Smooth hammerhead, *S. zygaena* (no indentation on front of head at midpoint); great hammerhead, *S. mokarran* (sides of head not pointed)

**Habitat:** Coastal to offshore waters

**Size:** Up to 12 feet

**Notes:** Feed on fishes, stringrays and squid; males mature at about 6 feet



## Bonnethead Shark

*Sphyrna tiburo*

**Family** Sphyrnidae, Hammerhead Sharks

### Description:

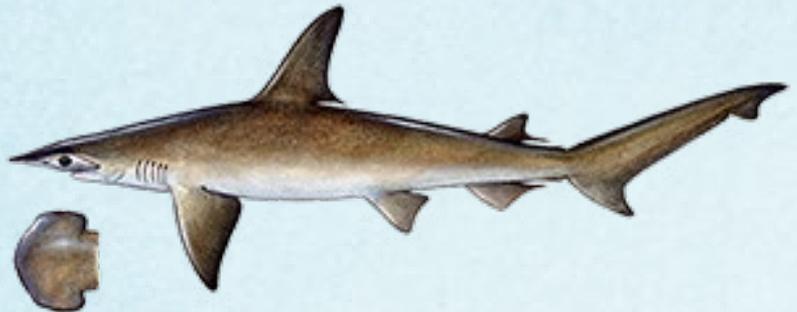
- Head is broadly widened into the shape of a shovel
- Front of head NOT notched at midline
- Back is gray or grayish-brown in color

**Similar Species:** Other hammerhead sharks obtain larger size and have hammer-shaped heads

**Habitat:** Coastal waters, including bays and estuaries

**Size:** Up to 4.5 feet

**Notes:** Mature at about 3 feet in length and produce 6 to 12 young at a time; feed mainly on crabs and other crustaceans



## Southern Stingray

*Dasyatis americana*

**Family** Dasyatidae, Stingrays

### Description:

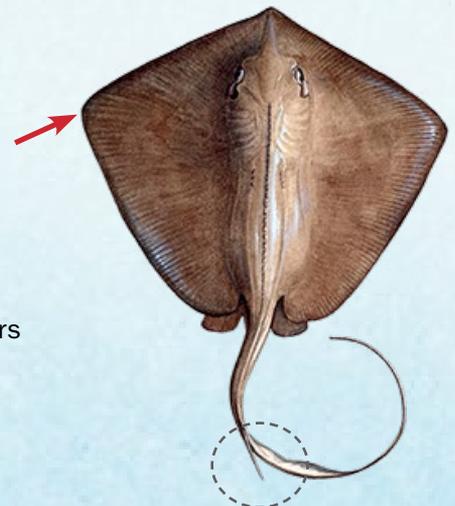
- Disk almost a perfect rhombus, with pointed corners
- Fin-fold on underside of tail is long and high, usually dusky or black in color
- Fin-fold on back is very low or absent
- Back is dark brown (more gray in juveniles)
- Defensive venomous barb near base of long whip-like tail

**Similar Species:** Atlantic stingray, *D. sabina* (snout sharply pointed); other stingrays; whip-like tail with venomous barb differentiates them from skates

**Habitat:** Bottom-dwelling species common in bays, estuaries and coastal waters

**Size:** Up to 5 feet in disk width

**Notes:** Feed on invertebrates and small fishes



## Atlantic Stingray

*Dasyatis sabina*

**Family** *Dasyatidae*, Stingrays

### Description:

- Brownish to yellow-brown on back and white underneath
- Corners of disk are rounded
- Snout pointed and projecting
- Defensive venomous barb near base of long whip-like tail
- Low dorsal and ventral fin folds on tail which are light-brown or dusky in color

**Similar Species:** Other stingrays are typically larger and lack a pointed snout; whip-like tail with venomous barb differentiates them from skates

**Habitat:** Bottom-dwelling species that inhabits coastal waters, including estuaries, lagoons and sometimes rivers

**Size:** Up to 2 feet in disk width

**Notes:** Feed on benthic invertebrates, polychaete worms, small crustaceans, shrimp, crabs, mollusks and sometimes small fishes



## Clearnose Skate

*Raja eglanteria*

**Family** *Rajidae*, Skates

### Description:

- Brown or gray in color and white underneath
- Small, dark spots and bars on back, but they are not ocellated
- Snout is pointed and translucent on either side
- Single row of spines located on disc behind spiracles, continuing to tail
- Dorsal fins similar in size and located near end of caudal fin (tail)
- Lack venomous barb

**Similar Species:** Other skate species; stingrays have a similar body shape, but possess a long whip-like tail equipped with a venomous spine

**Habitat:** Coastal and offshore species, found in brackish and salt waters over soft, sandy bottoms to depths up to 390 feet

**Size:** Up to 1.5 feet in disk width

**Notes:** Feed on crustaceans, mollusks and other small invertebrates

