

Our waters are full of interesting animals many of which we know very little about. Yet they all play a vital role in keeping our rivers and sea healthy and with plentiful fish.

Large numbers of threatened dolphins, sharks, rays and marine turtles die in fishing nets. Unless we work together to save these amazing aquatic animals we may lose them forever. We think that would be a tragedy, don't you?

This booklet shares fun facts about dolphins and whales, sharks, rays and marine turtles in Bangladesh. We hope it will inspire you to join our efforts to protect these animals from disappearing forever.



# AMAZING AQUATIC ANIMALS

## Whales, Dolphins, Sharks, Rays and Marine Turtles of Bangladesh



### Amazing Aquatic Animals

Whales and Dolphins, Sharks, Rays and Marine Turtles of Bangladesh

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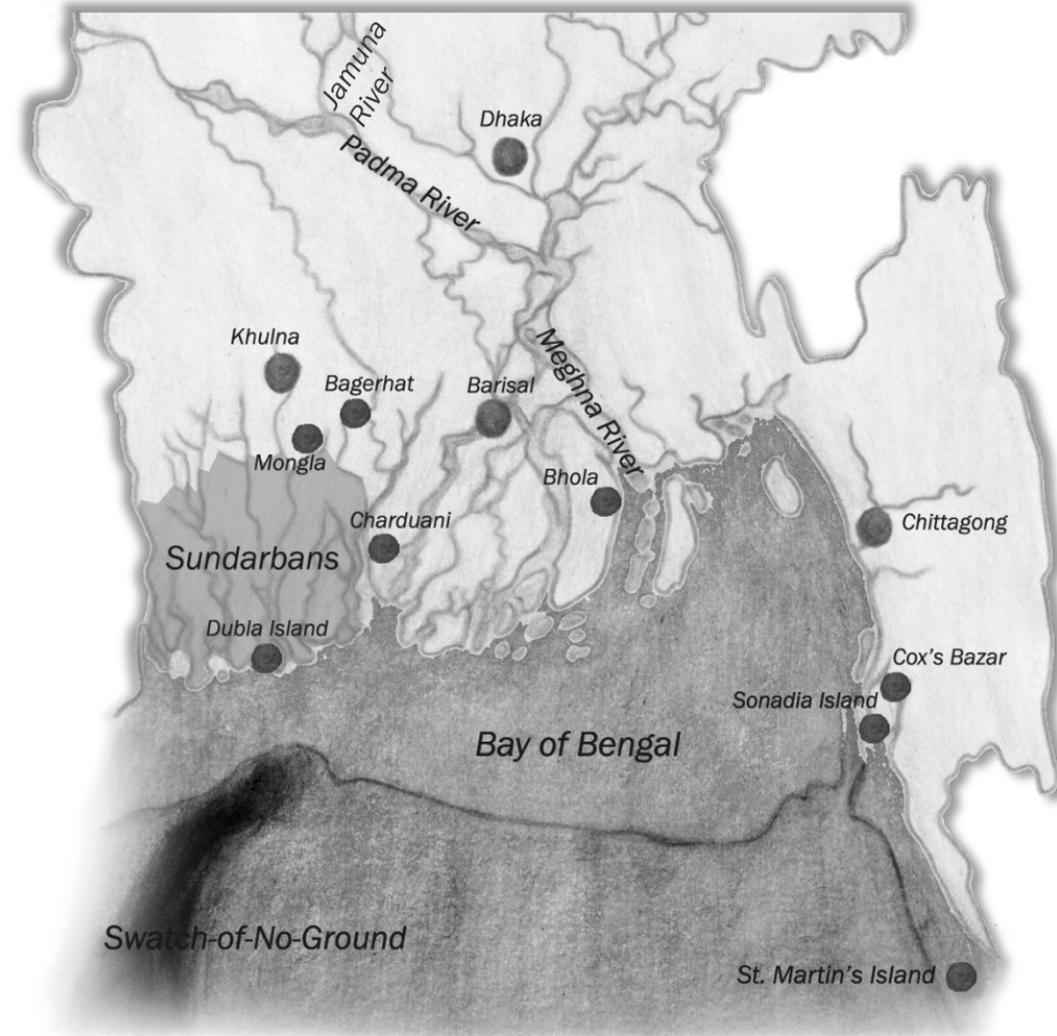
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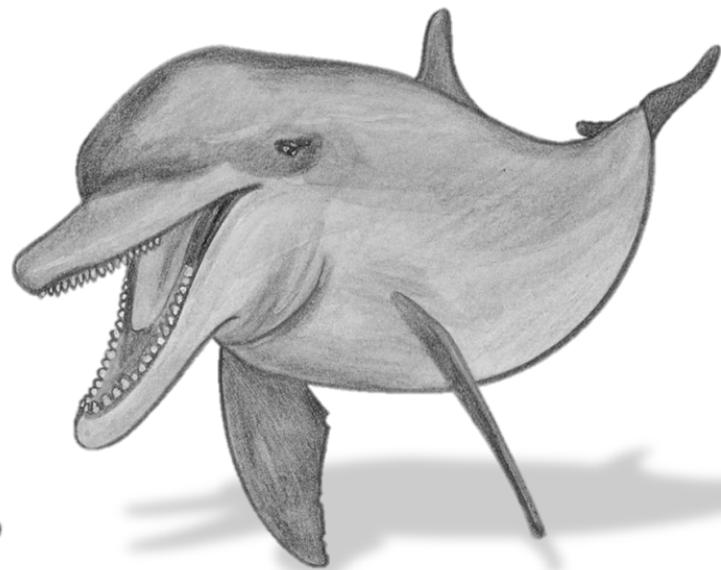
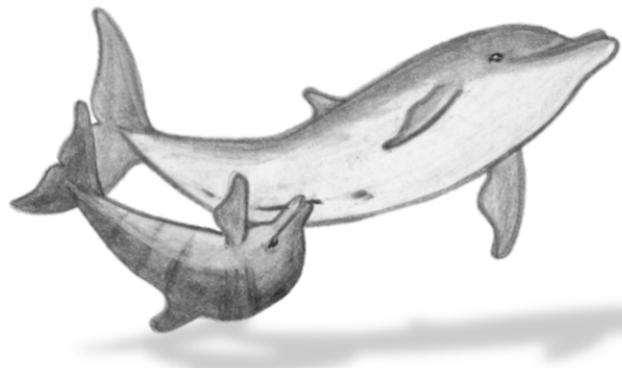


Hundreds of large and small rivers crisscross our country. They all flow into the Bay of Bengal.

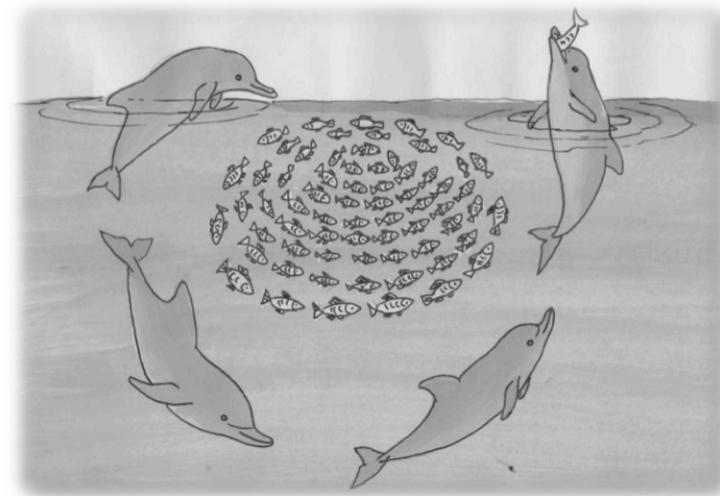
Let us dive in and take a closer look at the amazing animals that live in our rivers and coastal and deep sea waters.

## Dolphins and whales

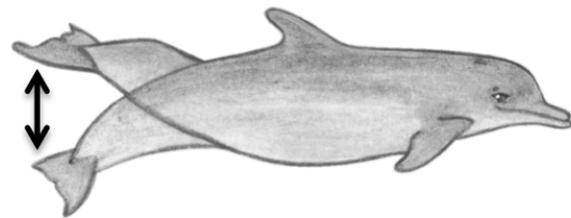
Dolphins and whales spend their entire lives in water. But they are not fish. Dolphins and whales are air-breathing mammals – just like us. They must come to the surface to breathe. If they are trapped underwater, they will drown.



Mother dolphins give birth to live babies called calves. They feed their calves milk and take care of them until they can survive on their own.

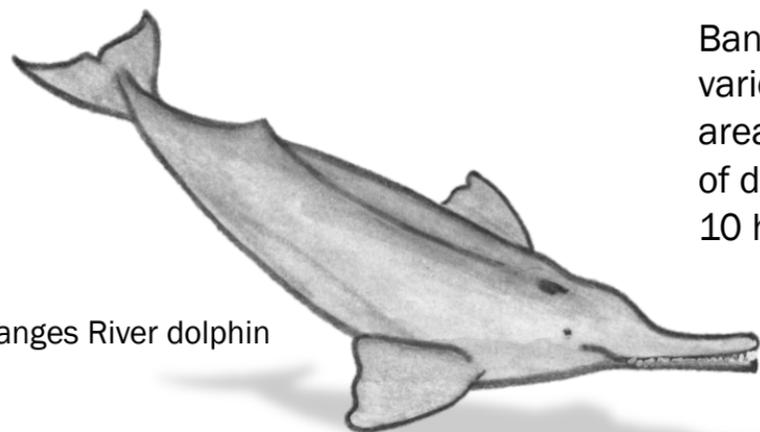


Bottlenose dolphins feeding on a fish ball



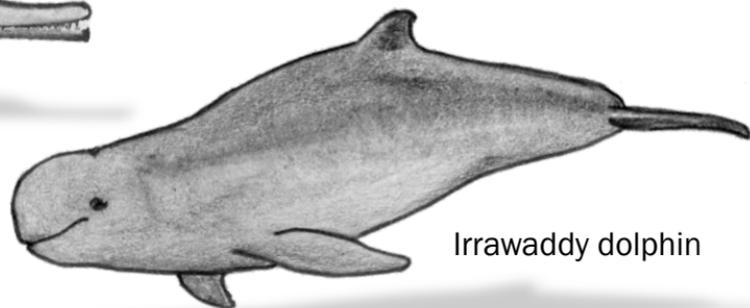
Marine dolphins often catch fish by working together to herd them into a dense mass. This allows the dolphins to catch the fish more easily with their sharp teeth.

The easiest way to tell the difference between a fish and a dolphin is by looking at the tail. Dolphins have horizontal tails that move up and down. Fish have vertical tails that move from side to side.



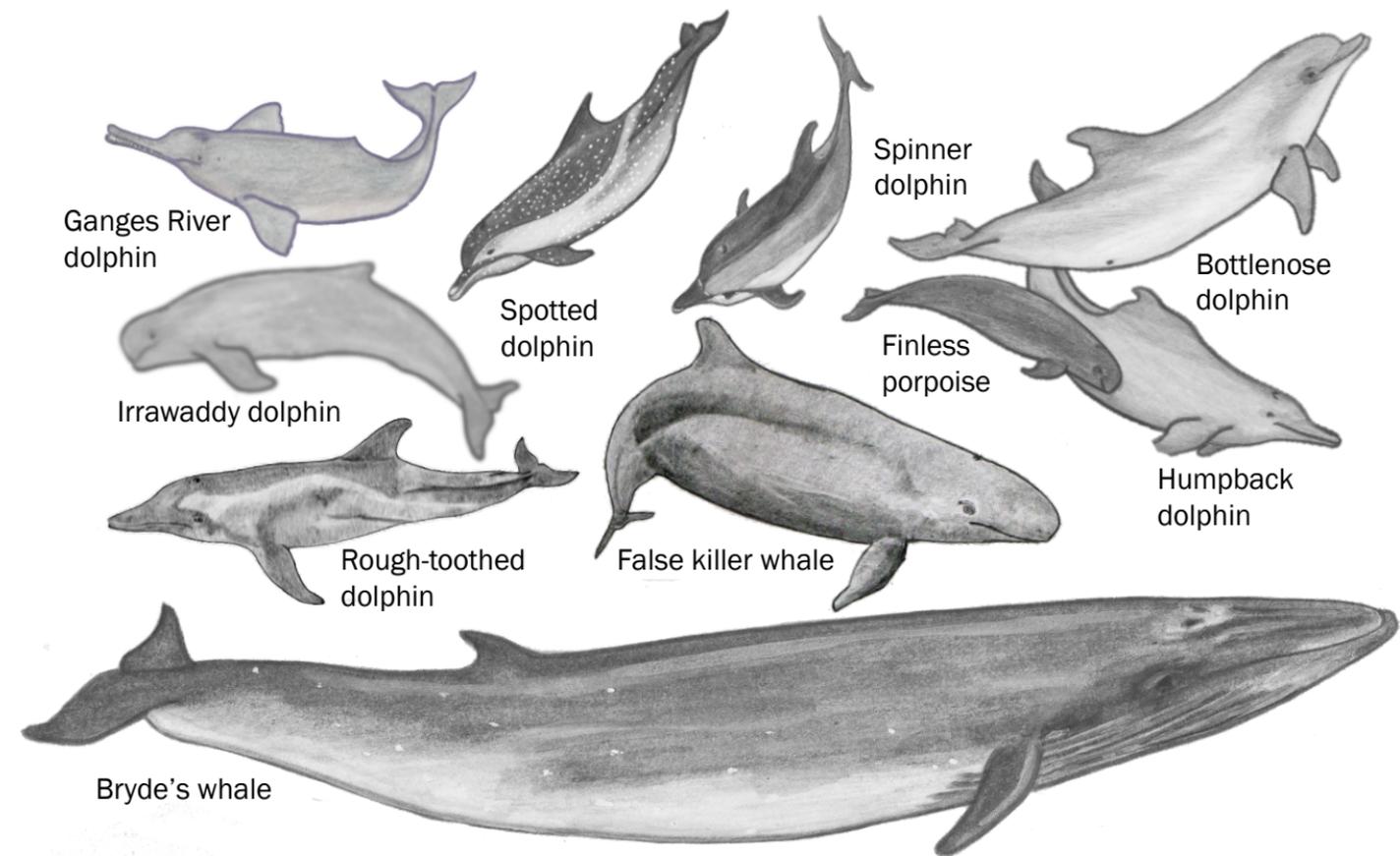
Ganges River dolphin

Bangladesh supports an extraordinary variety of dolphins and whales in a small area. Out of more than 80 different kinds of dolphins and whales in the world, 10 have been discovered in Bangladesh.



Irrawaddy dolphin

Most dolphins occur in our shallow coastal waters or around the deep sea canyon known as 'Swatch-of-No-Ground'. Some live in the tidal waterways of the Sundarbans mangrove forest. The Ganges River dolphin or Shushuk lives in our rivers as well as in the mangrove forest.



Ganges River dolphin

Spotted dolphin

Spinner dolphin

Bottlenose dolphin

Irrawaddy dolphin

Finless porpoise

Humpback dolphin

Rough-toothed dolphin

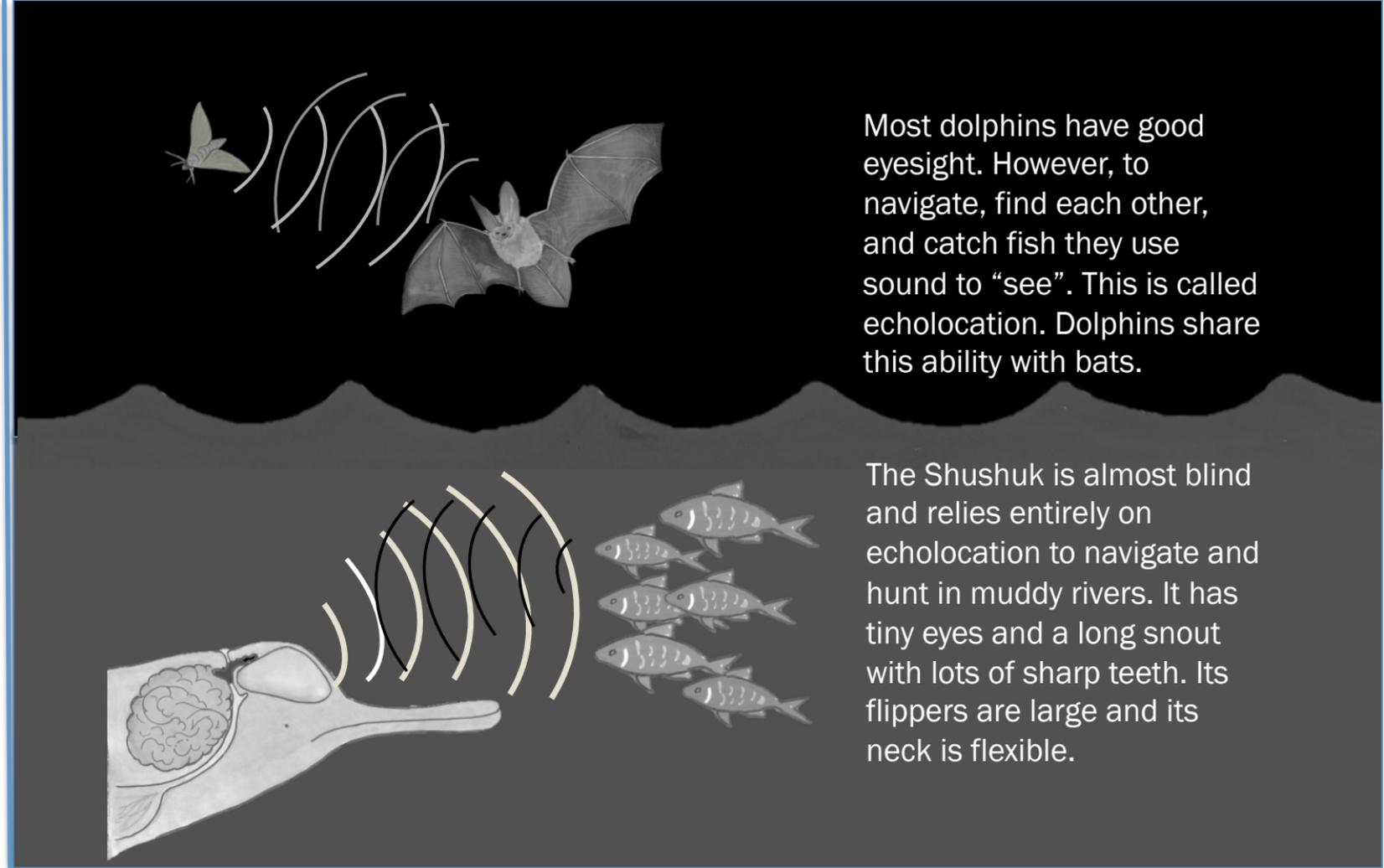
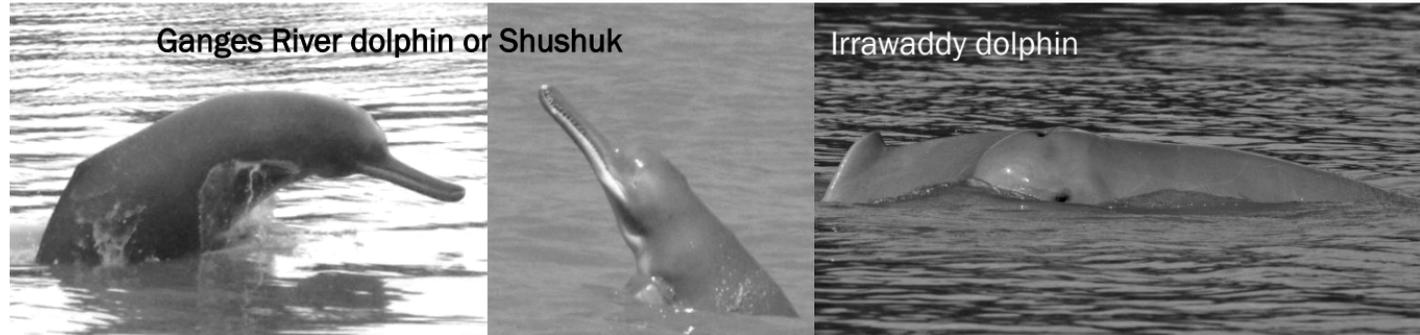
False killer whale

Bryde's whale

Bangladesh has two kinds of dolphins that depend on freshwater:  
The Shushuk and the Irrawaddy dolphin.

Shushuks are found in many rivers in Bangladesh and upstream in India and even Nepal. Shushuks are generally found alone or in small groups where rivers join or bend.

Waterways in the Sundarbans and adjacent coastal waters are home to the world's largest population of Irrawaddy dolphins.



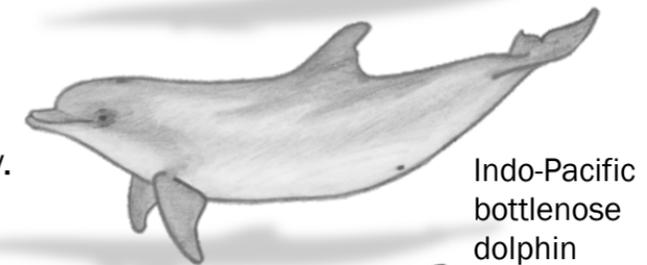
Dolphins and whales are important messengers of problems in our waters due to destructive fishing practices, climate change and pollution. These animals need clean water and plentiful fish just like us.

Dolphins and whales are threatened by humans. Each year many die when they become entangled in fishing nets and drown. The widespread use of mosquito nets for catching shrimp fry has depleted their fish prey.

River dolphins are particularly endangered because people are taking too much water out of where they live and dams prevent groups from coming together to breed.



Indo-Pacific humpback dolphin

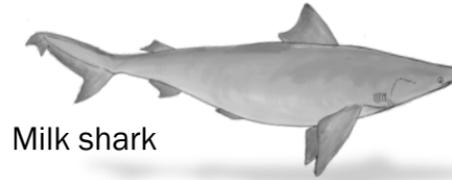


Indo-Pacific bottlenose dolphin

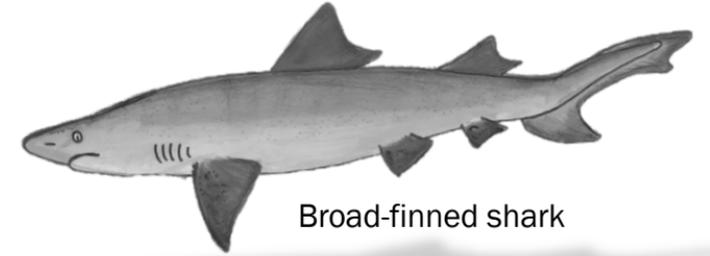


Pantropical spotted dolphin

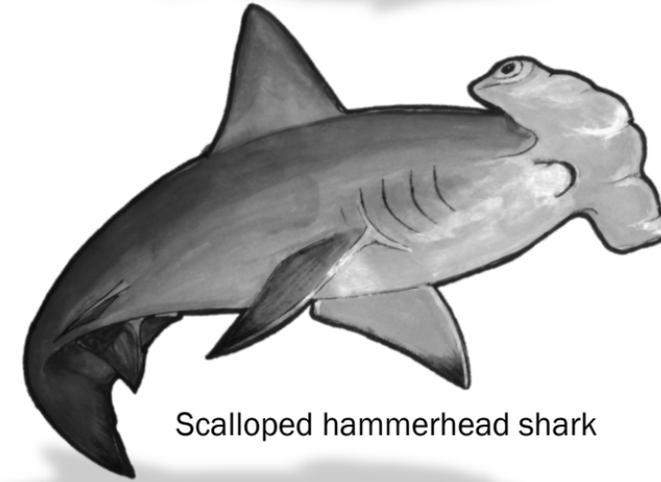
## Sharks



Milk shark



Broad-finned shark



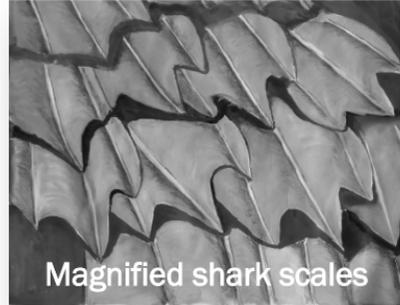
Scalloped hammerhead shark

Sharks are a kind of fish. But unlike most fish they do not have hard bones. They have a soft skeleton made of cartilage.

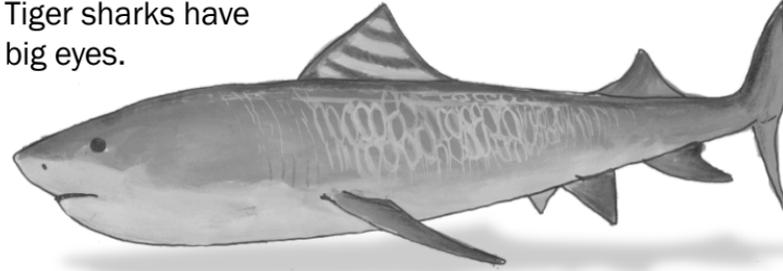
This is the same type of soft bone we have in our nose and ears. Sharks breathe through gills like most fish, but they have to actively move water through the mouth and across their gills to breathe. They do not have swim bladders to help them float. So sharks have to keep swimming to stay afloat and to breathe.

Sharks use smell, taste and hearing to locate their prey over long distances. Similar to other fish, sharks have sensors on their body and head that also help them to find prey.

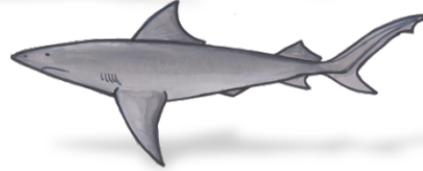
Shark skin is covered with tiny pointed teeth-like scales. These scales provide a tough outer skin for protection against predators which are mostly other sharks.



Tiger sharks have big eyes.

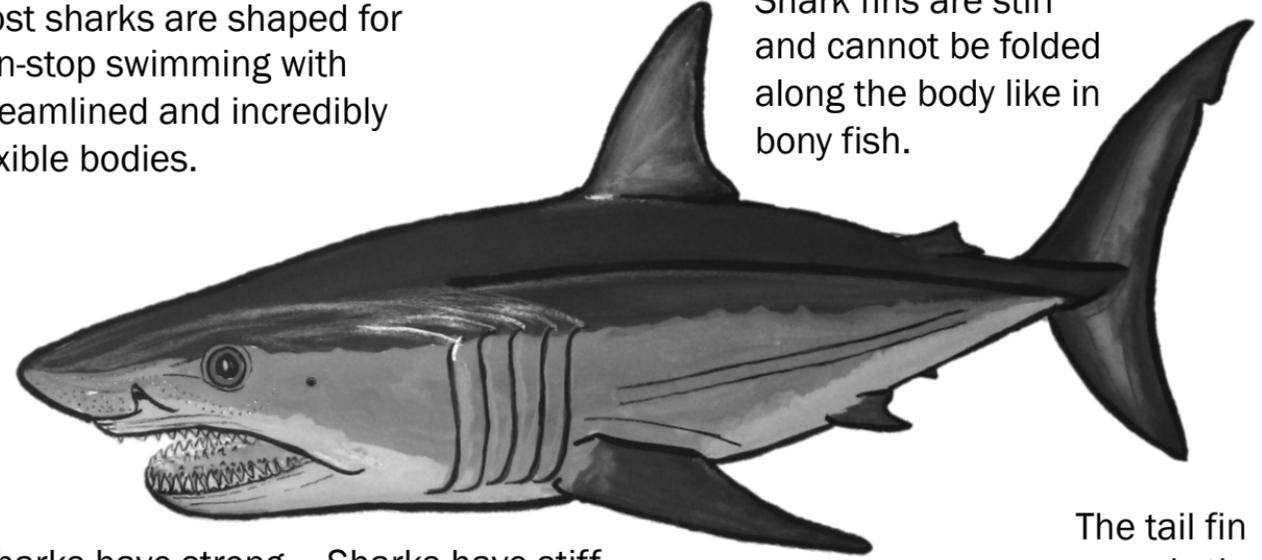


Ganges River sharks have small eyes.



Sharks that live in clear water have big eyes and good eyesight. Sharks living in murky rivers have tiny eyes and depend on their other senses to navigate and find their prey.

Most sharks are shaped for non-stop swimming with streamlined and incredibly flexible bodies.



Shark fins are stiff and cannot be folded along the body like in bony fish.

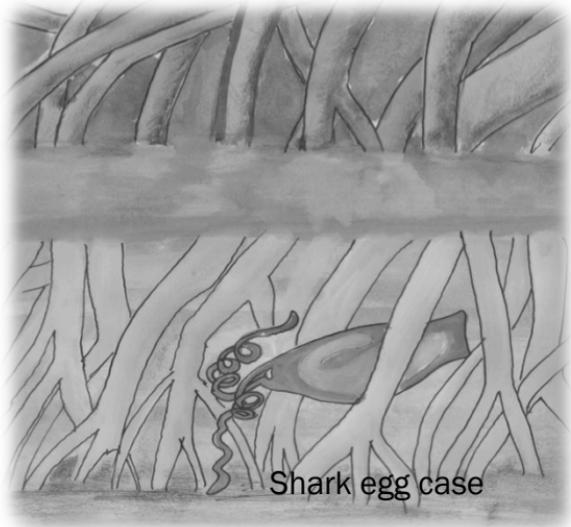
Sharks have strong jaws with lots of teeth. New teeth grow to replace the teeth they lose.

Sharks have stiff gill plates in five to seven gill slits on both sides of their head.

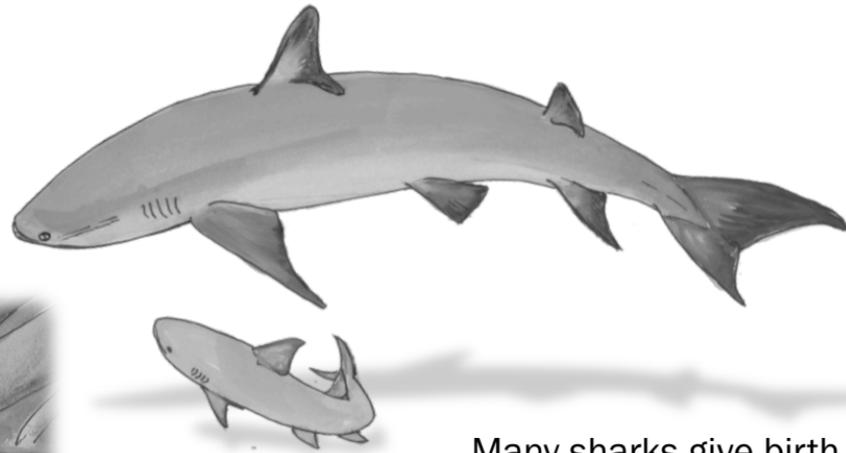
Fins on their back, belly and side help sharks turn and stay stable.

The tail fin propels the shark forward by moving back and forth.

Sharks grow slowly and have few babies. This means it takes a long time for more sharks to be produced.



Shark egg case



Many sharks give birth to live babies called pups.

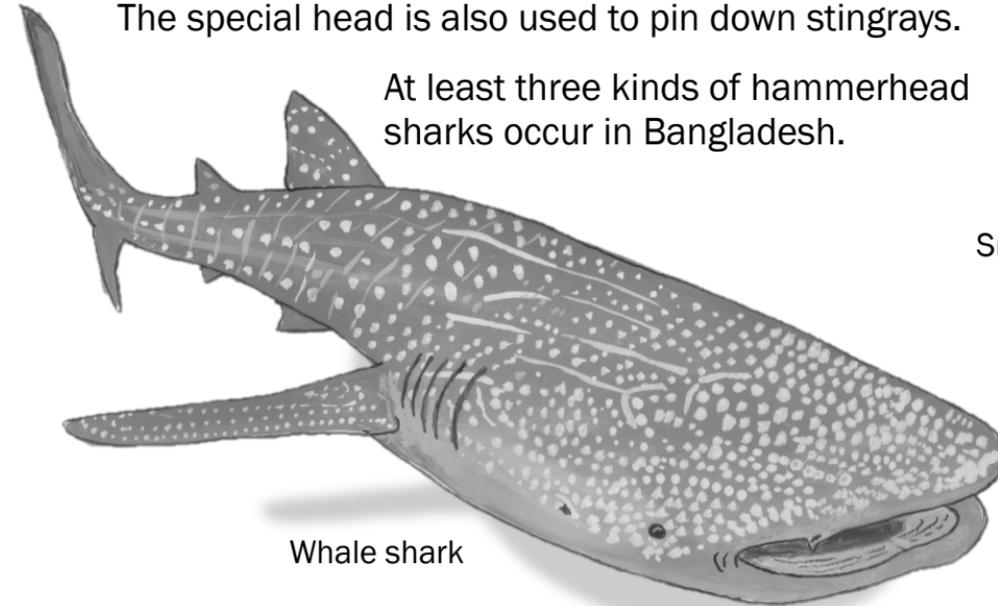
Others lay egg cases with growing pups inside. These protective shells come in many different shapes. They are often attached to the roots of mangrove trees.

Shark pups require no further care from their mother after birth.

**Hammerhead sharks** are exceptionally good at finding prey completely buried under the sand. Their flat wide head provides a large area for sensors. The eyes located at the ends of the head allow them to see better than other sharks.

The special head is also used to pin down stingrays.

At least three kinds of hammerhead sharks occur in Bangladesh.



Whale shark

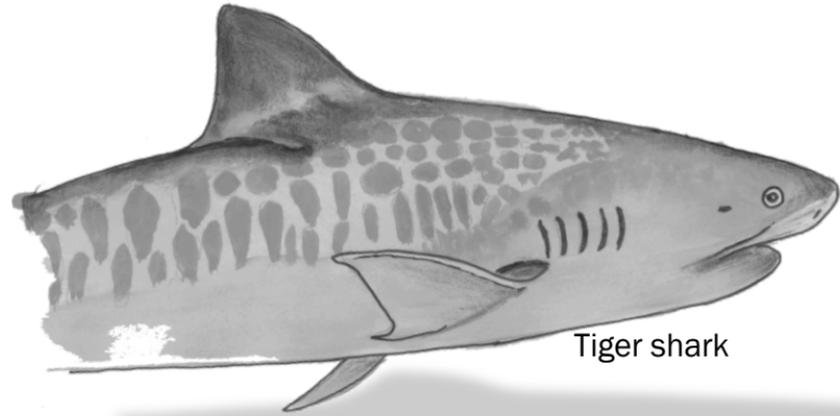


Smooth hammerhead shark

**Whale sharks** are the largest living fish. They can grow to the size of a bus. Like baleen whales, they feed on tiny fish and krill.

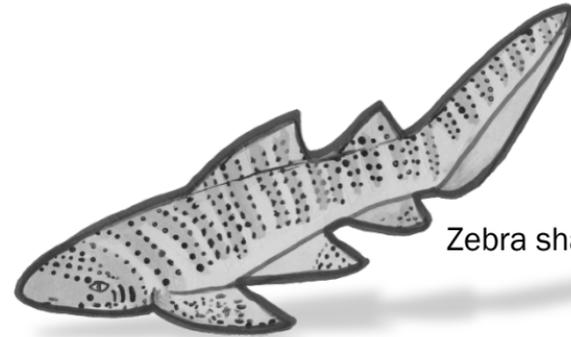
Sharks have no natural enemies, except for larger sharks and humans. They are top predators, just like tigers and dolphins.

People are more dangerous to sharks than sharks are to people. Many more people are killed each year from lightning strikes, snake bites or dog attacks than from shark.



Tiger shark

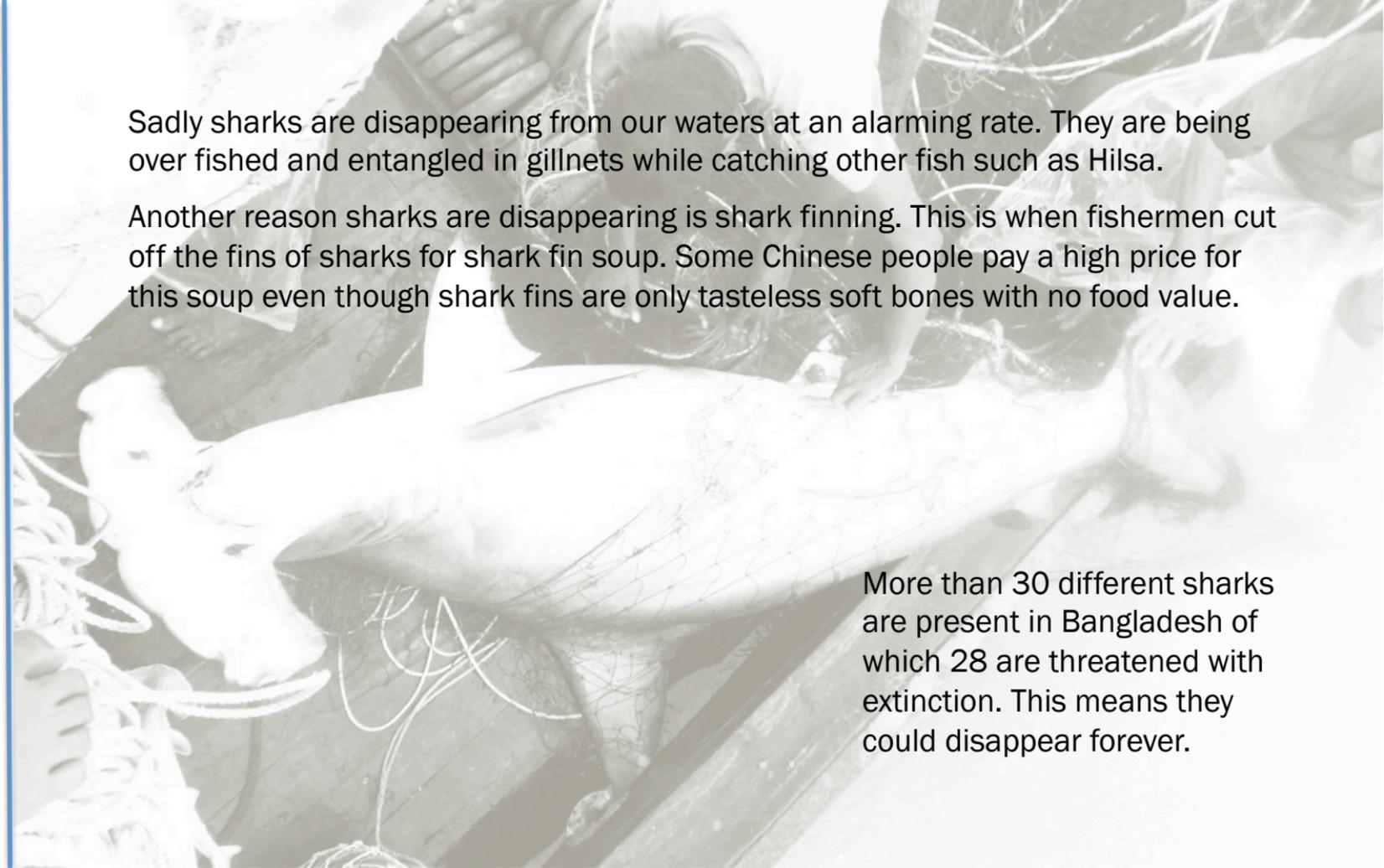
Sharks keep a healthy natural balance in our waters. They often eat weak and sick fish because these are easier to catch. If sharks disappear, we will lose many other valuable fish as well.



Zebra shark

Sadly sharks are disappearing from our waters at an alarming rate. They are being over fished and entangled in gillnets while catching other fish such as Hilsa.

Another reason sharks are disappearing is shark finning. This is when fishermen cut off the fins of sharks for shark fin soup. Some Chinese people pay a high price for this soup even though shark fins are only tasteless soft bones with no food value.

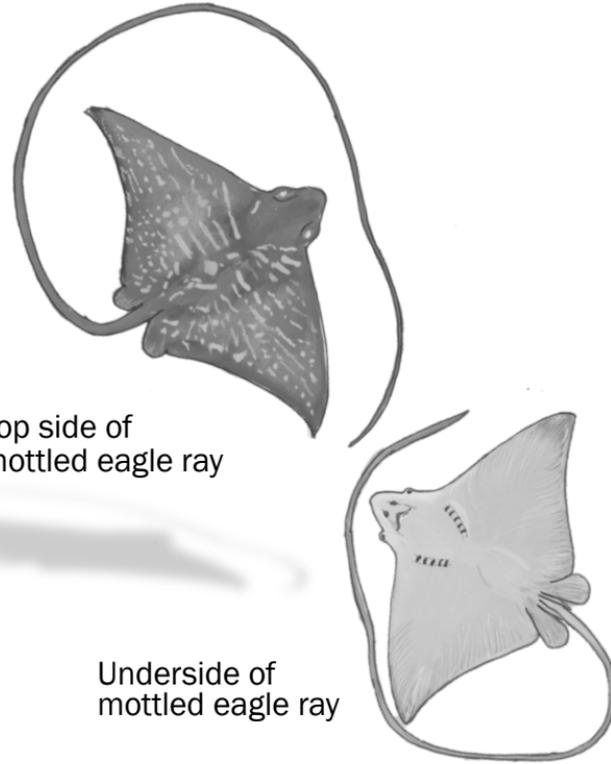


More than 30 different sharks are present in Bangladesh of which 28 are threatened with extinction. This means they could disappear forever.

## Rays

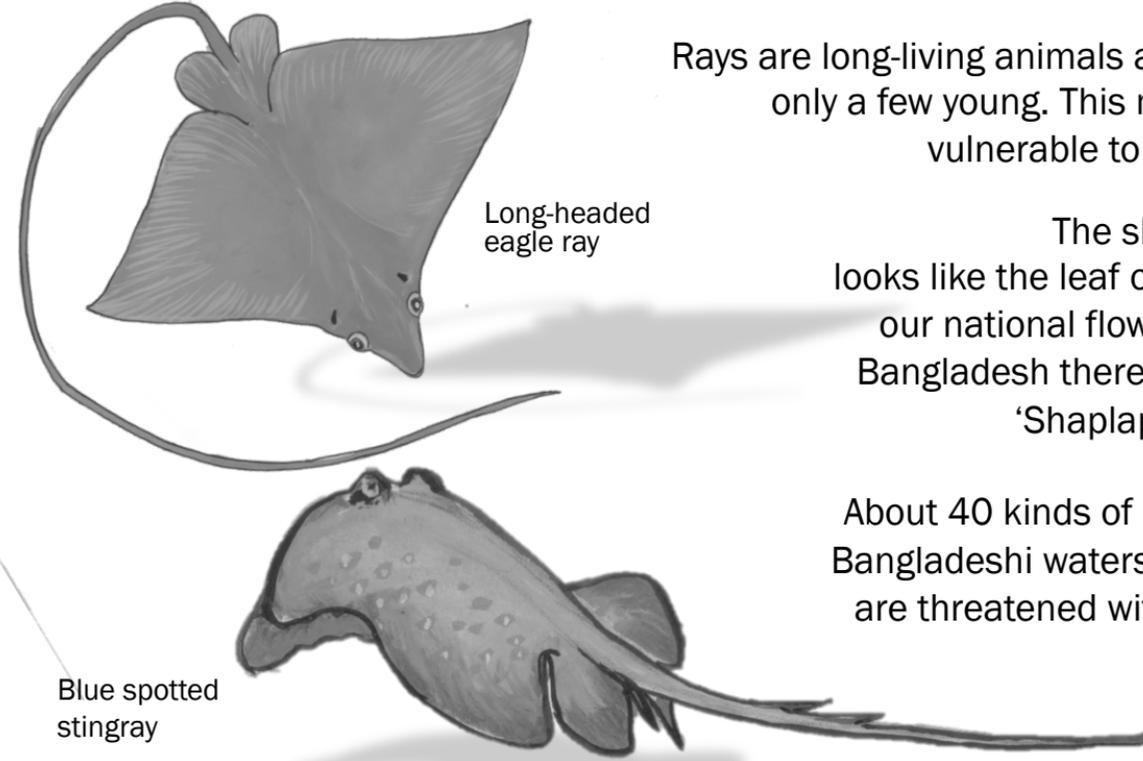
Rays are flat fish with broad wing-like fins. Their eyes are on the top of their head while their mouth, nostrils and five pairs of gill slits are on the underside of the fish. To swim they flap their fins like a bird flaps its wings.

Rays are closely related to sharks. Like sharks, their skeleton is made from soft cartilage. Rays feed on clams, snails, crustaceans and small fish. They have a strong sense of smell to find their prey, just like sharks.



Top side of mottled eagle ray

Underside of mottled eagle ray



Long-headed eagle ray

Blue spotted stingray

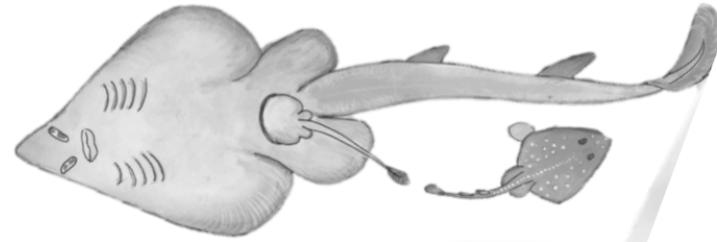
Rays are long-living animals and produce only a few young. This makes them vulnerable to overfishing.

The shape of a ray looks like the leaf of a water lily, our national flower. People in Bangladesh therefore call rays 'Shaplapata machh'.

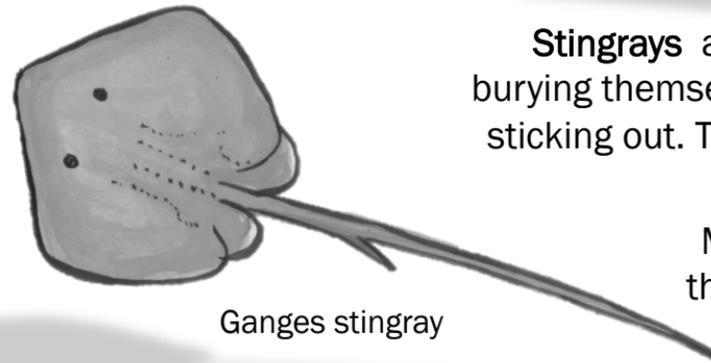
About 40 kinds of rays found in Bangladeshi waters of which 22 are threatened with extinction.

Rays also include sawfish, guitarfish, electric rays, skates and stingrays.

Skates lay egg cases while all other rays give birth to live young. Many rays have poisonous spines on their slender whip-like tails.



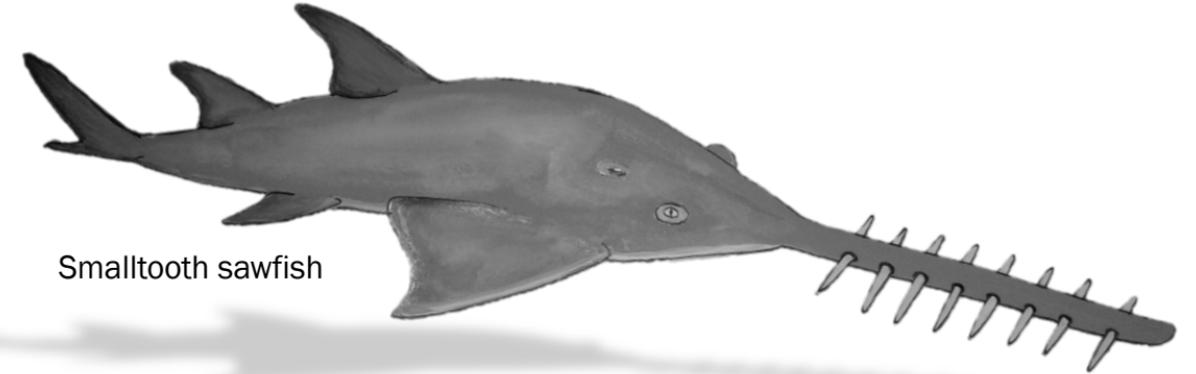
Guitarfish giving birth to live pups.



Ganges stingray

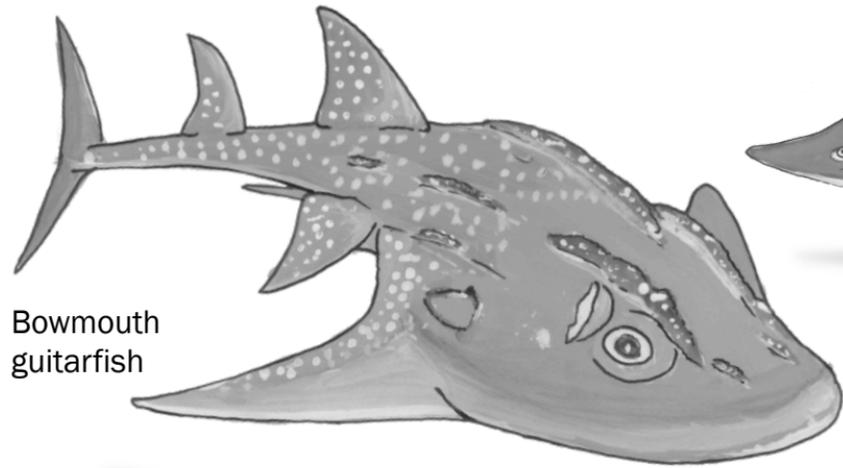
**Stingrays** ambush prey and hide from predators by burying themselves in sand or mud with only their eyes sticking out. They use their poisonous spine to defend themselves against predators.

More than half of all stingray species are threatened with extinction. Little is known about the stingrays in Bangladesh.

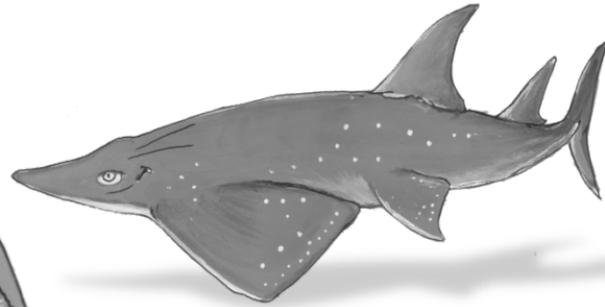


Smalltooth sawfish

**Sawfish** are a kind of ray with wide side fins and a long snout lined with tooth-like structures sticking out on both sides. Their snout is used to detect and dig up fish, lobsters and crabs buried in the sand, slash their prey and defend themselves. The tooth-like structures on their snout make sawfish extremely vulnerable to becoming entangled in fishing gear. The three kinds of sawfishes that occur in Bangladesh are among the world's most endangered animals.



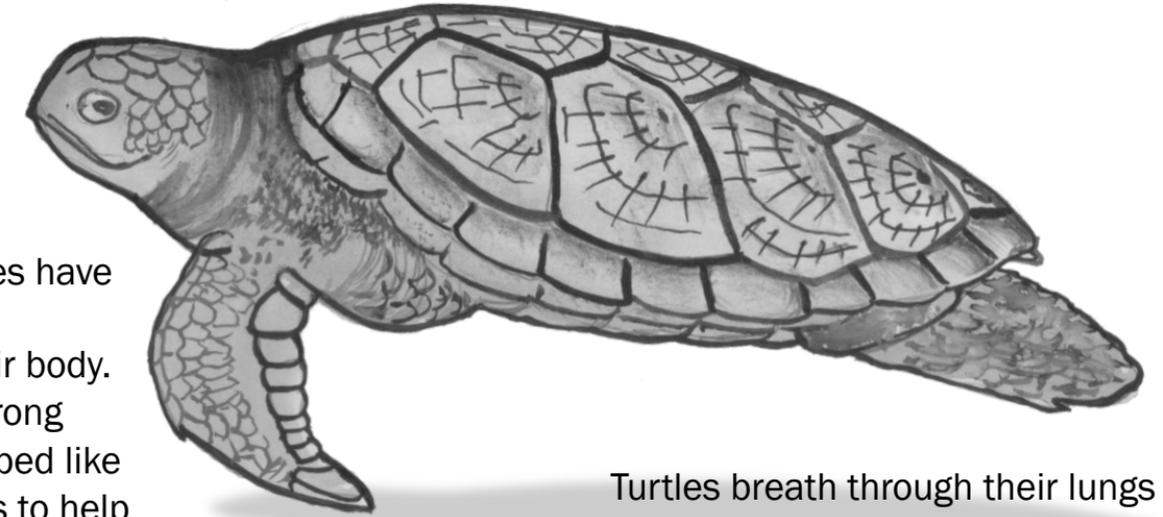
Bowmouth guitarfish



Sharp-snouted guitarfish

At least five different kinds of **guitarfish** are found in the coastal and estuarine waters of Bangladesh. Their name describes their rounded head shape and skinny tail similar to a guitar. Guitarfish feed along the bottom on worms, shrimp and crabs. Guitarfish are highly valued in Bangladesh because some people believe their fat and soft bones can be used as medicine for relieving pain.

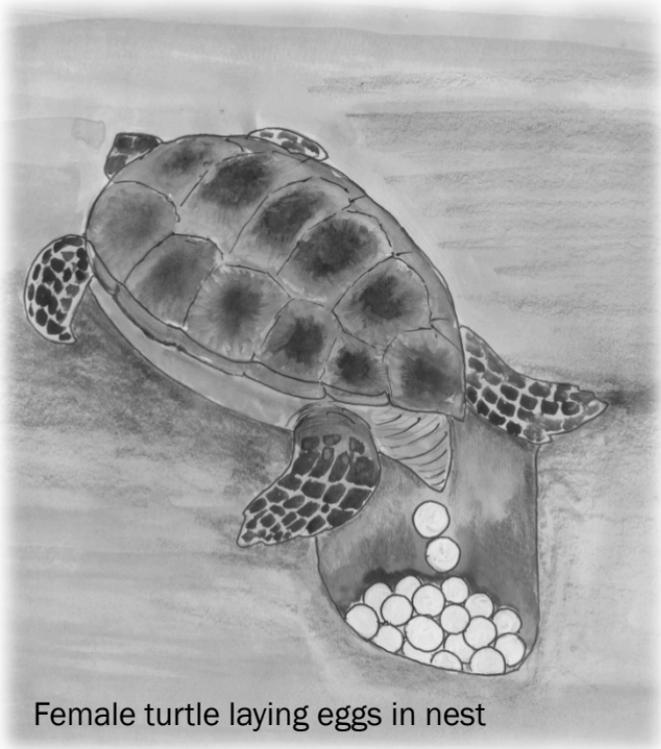
## Marine turtles



Marine turtles have a hard shell covering their body. Their four strong legs are shaped like large flippers to help them move swiftly through the water.

Marine turtles can live up to 100 years.

Turtles breathe through their lungs like humans. Marine turtles can stay under water for up to two hours. Jellyfish, squid, shrimp, crabs, small fish, sponges and sea grass are among the foods marine turtles like best.



Female turtle laying eggs in nest

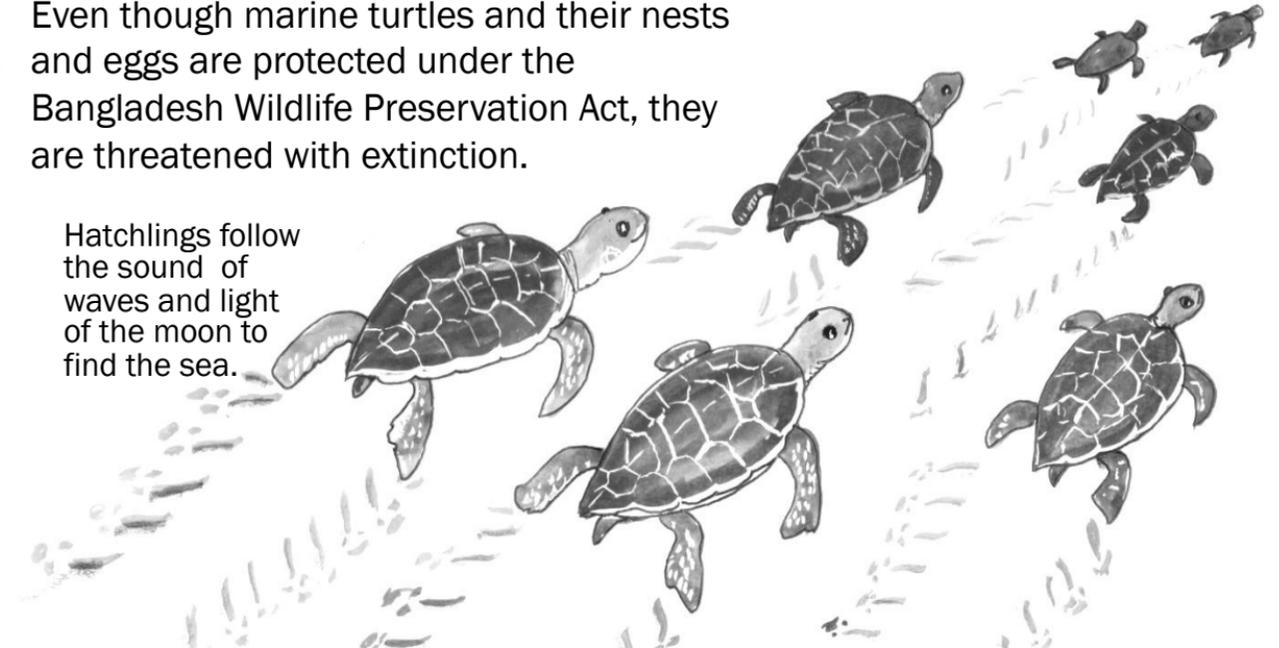
Marine turtles are egg-laying reptiles. Female marine turtles dig a deep hole in sandy beaches and lay lots of round eggs in it. They protect the eggs by covering the nest with sand before returning to the water.

After leaving their nest the turtle babies or hatchlings crawl straight to the sea. Once male marine turtles leave the beach as hatchlings, they never come on land again. Adult female turtles will return to the same beach to lay eggs.

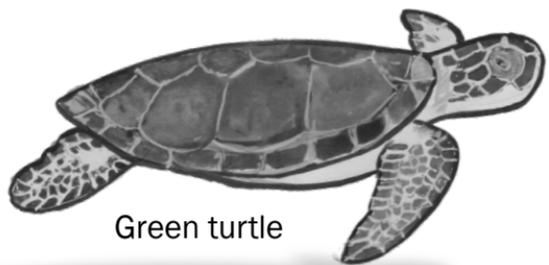
The sandy beaches and coastal islands in Bangladesh are ideal nesting sites for marine turtles. But many nesting beaches are disturbed or have been destroyed. Dogs, monitor lizards, jackals, wild boar and people steal eggs from their nests. Many marine turtles also die when trapped in fishing nets.

Even though marine turtles and their nests and eggs are protected under the Bangladesh Wildlife Preservation Act, they are threatened with extinction.

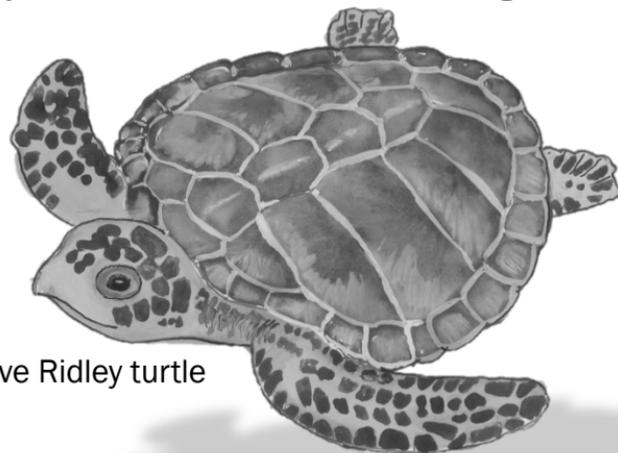
Hatchlings follow the sound of waves and light of the moon to find the sea.



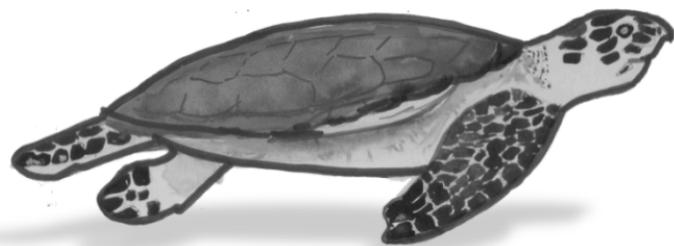
There are seven different kinds of marine turtles in the world. Five of them are thought to occur in Bangladesh, although only three have been seen nesting.



Green turtle



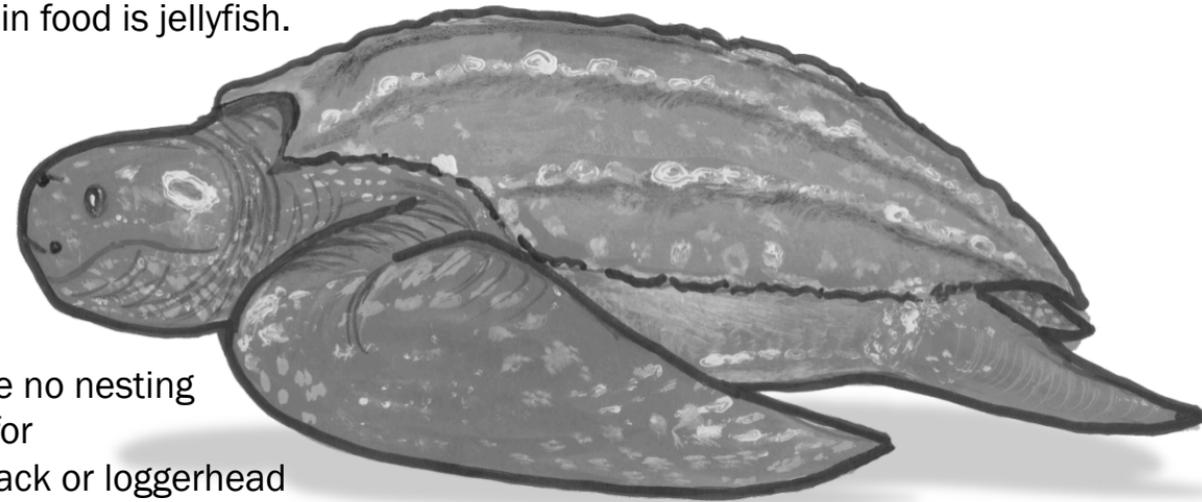
Olive Ridley turtle



Hawksbill turtle

Olive Ridley and green turtles are commonly seen in Bangladesh. Hawksbill turtles are rare and have been observed to nest only on St. Martin Island.

Leatherback turtles are the largest of all marine turtles. A full-grown leatherback turtle can grow bigger than a baby taxi. Instead of a hard shell, leatherback turtles have a thick leathery skin. Under their skin they have a thick layer of fat that helps them to stay warm. No other turtle has this protective layer. Leatherback turtles can dive 3,000 feet or 900 meters. This is deeper than any other turtle. Their main food is jellyfish.



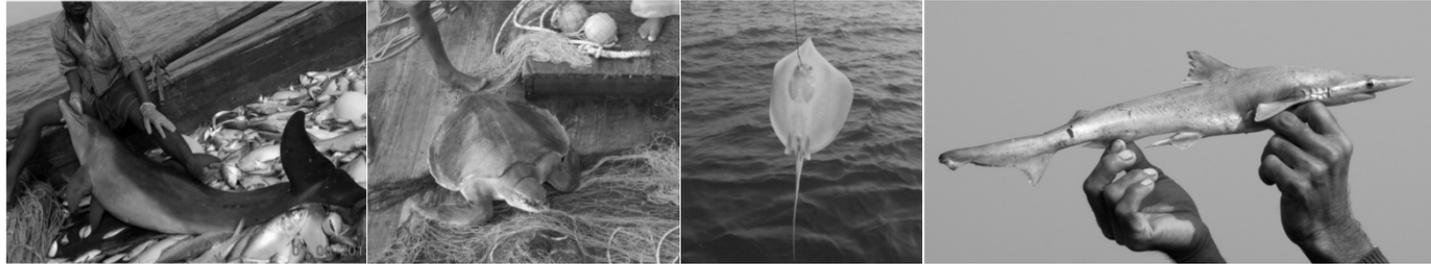
Leatherback turtle

There are no nesting records for leatherback or loggerhead turtles in Bangladesh.

## How can we protect dolphins, whales, sharks, rays and marine turtles in Bangladesh?

Much remains to be learned about these amazing aquatic animals. But we know for certain that they are more valuable alive than dead. These animals play a vital role in keeping fish populations healthy. Millions of people in our country depend on fish for food or income.

Dolphins, whales, sharks, rays and marine turtles are slow growing animals that cannot reproduce fast enough to replace those that are killed in fisheries. Climate change is also changing the marine environment which could affect the ability of these animals to survive.



In Bangladesh all dolphins, whales, sharks, rays and marine turtles are protected by law.

You can help save these animals if you...

- Release live entangled dolphins, sharks, rays and turtles from your nets.
  - Fish only where and when allowed.
  - Protect turtle nests from predators.
- Do not sell, buy or eat dolphins, sharks, rays, marine turtles, or any parts of them.
- Do not dump garbage into the water especially plastic bags.
  - Share your knowledge and inspire others to conserve our country's natural heritage.

Take a stand for wildlife in Bangladesh by protecting our Amazing Aquatic Animals from extinction

The Wildlife Conservation Society (WCS) saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature. For over ten years the Wildlife Conservation Society Bangladesh Program has been working with local fishing communities, government agencies, and national scientists to find practical solutions to save Bangladesh's Amazing Aquatic Animals from extinction.

WCS discovered that Bangladesh is one of the world's most important countries for supporting threatened whales, dolphins, sharks, rays and marine turtles. We have inspired local people to safeguard biodiversity through innovative education outreach programs. And we have protected these animals by working with fisherfolk and government officials to find conservation solutions, promote sustainable fishing livelihoods and establish protected areas for our Amazing Aquatic Animals.

