God's Miraculous Tortoises, Turtles, and Terrapins!

Desert Tortoise

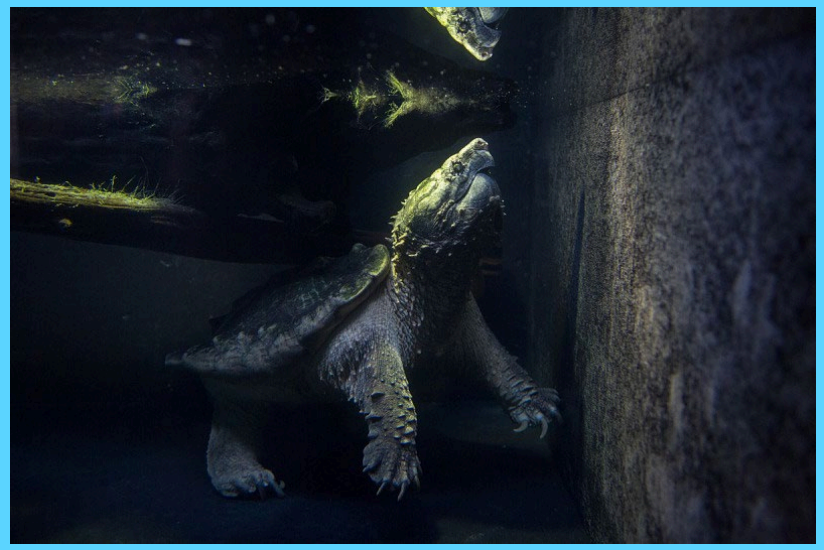
Bog Turtle

Diamondback Terrapin

All animals were created by Father God, the Lord Jesus Christ, and the Holy Spirit

Tortoises, Turtles, and Terrapins are in the same animal family called Testudines. [tes-too-di-neez] There are about 356 species combining all 3.

Aldabra Tortoise



Alligator Snapping Turtle

Female Diamond Back Terrapins In Maryland

Tortoises, otherwise known as land turtles, live everywhere except in Antarctica. They do not have webbed feet.

Red-Footed Tortoise

Some turtles are aquatic and live in ocean salt water.

Hawksbill Sea Turtle

Others are ALSO aquatic, but live in fresh water ponds, rivers, and streams.

Painted Turtle

Terrapins live in coastal waters that are salty, as well as, fresh and brackish water. Brackish, meaning part salty and part fresh water marshes, where the rivers meet the sea.

Diamondback Terrapin

There are 2 types of turtle shells - hard and soft shell. The turtle's exterior shell is actually an important part of a turtle's skeleton. It is a part of its spine. A turtle's internal skeleton is made of both cartilage and about 60 different bones. They also have skin, muscles, tendons, and ligaments that hold the shell onto their bodies. The top is called carapace. The bottom is called plastron. Those 2 parts join together on all sides leaving room for the turtle's head, limbs or flippers, and tail to extend from the shell.

Hard Shelled Turtle

Eastern Box Turtle

Soft Shelled Turtle

Fly River Turtle

This Spider Tortoise has scutes. Notice the rings on each one that help to determine it's approximate age.

Those turtles with a hard exterior shell have bony plates called "scutes" [pronounced scoots] These are made of Keratin – the same material that human fingernails and hair are made of. As a turtle's body grows, its shell grows new wider scutes underneath the old ones. Then the old scutes are shed to make room for the new ones. Hard shelled turtles shed their shell every 1 to 5 years. Even though the scutes get larger in size – the number of scutes remains the same. You can estimate the age of a turtle by counting the rings on its scutes. Turtles also shed the skin on their limbs, head, and tail.

Softshell turtles are fascinating creatures found near rivers, lakes, large streams, and reservoirs! They like soft bottom surfaces, with very little aquatic vegetation, because they can also bury themselves in sand, and mud in shallow water AND still breathe. They do this for 2 reasons, to hide from their enemies and to hide from their prey. Softshell turtles have long snouts that act just like a snorkel with the tip just touching the surface. Then they wait to ambush their prey. These include crayfish, fish, mollusks, aquatic insects, amphibians, worms, and carrion. They like mire flats, and sand bars for basking, but they can also bask by floating on top of the water. They also prefer sandy and gravelly areas for laying eggs. Access to deep water is essential for hibernating. Softshell turtles have no scutes. Their shell is leathery. Their feet are webbed. They can move quickly on land, but because of their flattened exterior, they are fast swimmers and can pursue prey quickly. Just like most animals, they have predators who eat them too, like raccoons, skunks, and foxes.

Spiny Softshell Turtle

Smooth Softshell Turtle

Spiny Softshell Turtle

Florida Softshell Turtle

Fly River Turtle

There are 3 groups of Testudines when talking about the ability to retract their heads:


Sonoyta Mud Turtle


Australian Snake-Necked Turtle


Green Sea Turtle

1. CRYPTODIRES are Testudines that pull their heads straight back, and can completely retract their heads into their shells.

2. PLEURODIRES are turtles who do not retract the head and neck into the shell. Instead, they lay their heads to the side and tuck their heads under the edge of the shell. Testudines that fit this category are divided into 3 families: African Mud Terrapins, Austro-South American Side Necked Turtles, and American Side Necked River Turtles. There are approximately 90 side necked turtles within the approximately 356 species of Testudines that exist.

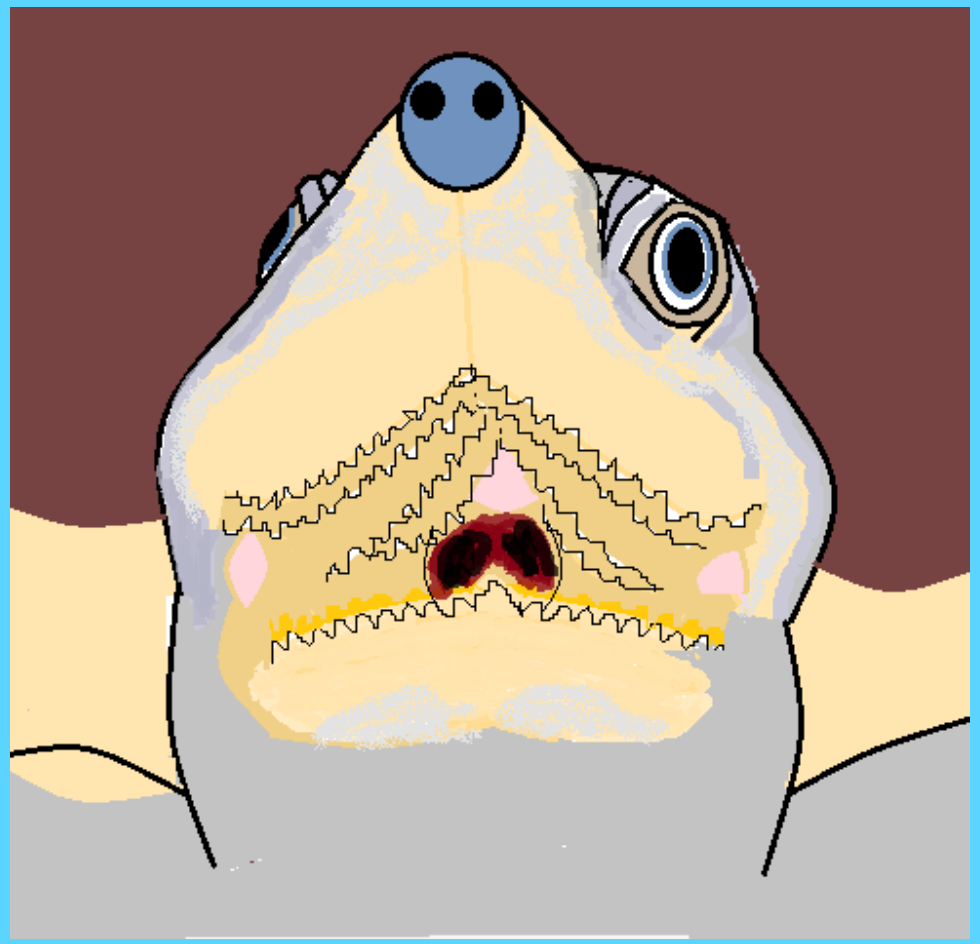
3. Sea turtles like this Green Turtle, do not retract their limbs, head, and neck at all. Sea turtles that have flippers instead of legs cannot retract their head, neck, or flippers. This does not give them a disadvantage as long as they are in the water. There they can use their powerful flippers to swim swiftly to protect themselves, but it DOES put them at risk when they come on land to lay their eggs.

Green Turtle burying her eggs.

Baby turtles have one egg tooth also made of Keratin to help them break out of their egg shells, otherwise turtles do not have teeth. Their mouths vary according to the species of turtle and their particular diet.

Egg tooth on a baby Eastern Box Turtle

Most turtles DO have a beak that is good for tearing and biting. Some turtles have one or more layers of serrated gums that are tough and made of Keratin too. Serrated means they have ridges on the edges. The ridges on the turtle's gums help to cut food as well as hold prey.



Which is the most common among the Testudines -

Carnivores (meat eaters),

Herbivores (plant eaters),

or Omnivores (meat and plant eaters)?

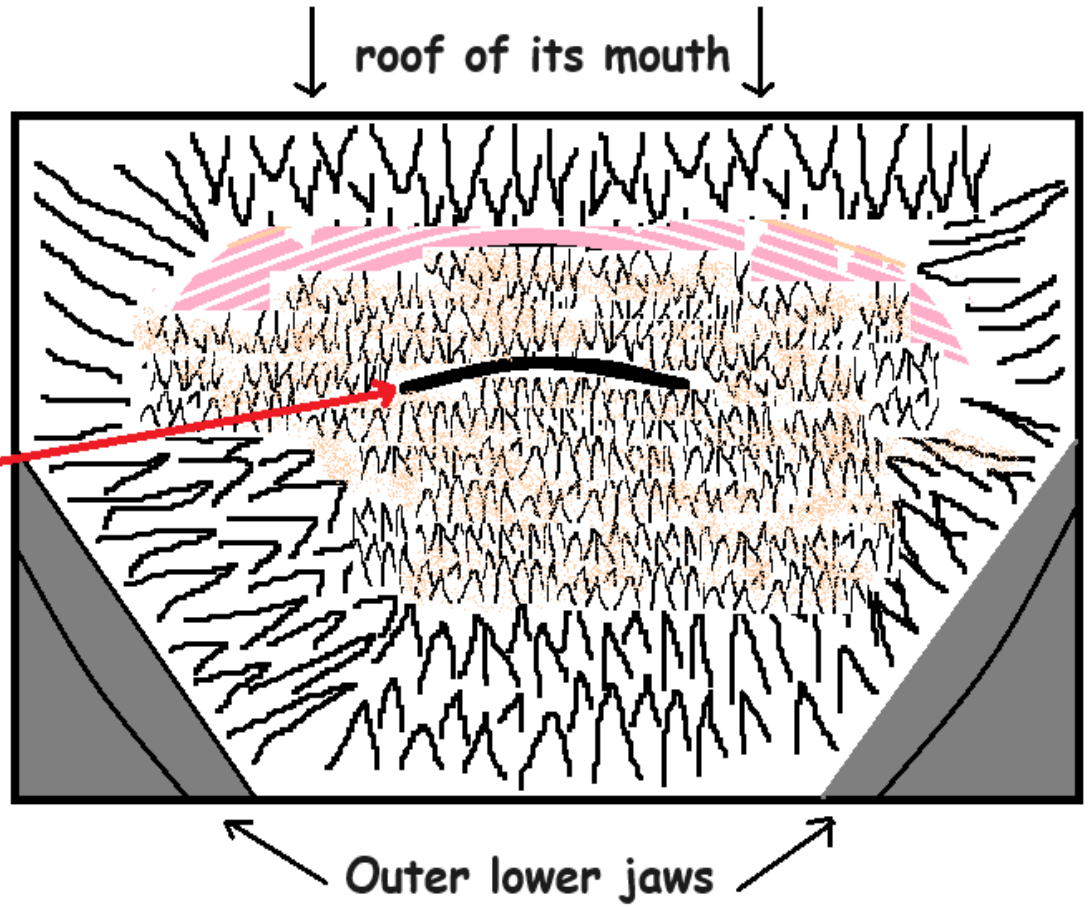
Most members of the Testudines are Omnivores, meaning eating a combination of both plants and animals.

Leatherback Sea Turtles are CARNIVOROUS. Their primary food is Jellyfish. The inside of a Leatherback's mouth and esophagus contains cone shaped sharp spines or projections called esophageal papillae [pa-pill-ee]. They are made out of KERATIN, the same thing human fingernails and hair are made of. The Leatherback swallows a lot of water in the process of capturing a Jellyfish. They want the Jellyfish as their food, but they regurgitate the water. These sharp spines act as a sieve - hooking their prey so that they can't escape and at the same time allowing the regurgitated water to break through and to leave their mouths. They also prevent the turtle's mouth from being stung by the Jellyfish while it's in the process of killing and eating it.

The hundreds of papillae [pa-pill-ee] face backwards towards the back of the throat to trap the Jellyfish.

The back of the throat.

The Interior of a Leatherback Turtle's Mouth



The outer papillae, [pa-pill-ee] towards the front of the Leatherback turtle's mouth, are white. The papillae are larger at the front of the turtle's mouth and as they extend towards the back of the throat become smaller. They continue all the way down the turtle's esophagus. The deeper they go into the mouth and throat - they are peach colored.

This Loggerhead Sea Turtle is CARNIVOROUS. Its main diet consists of: mollusks, horseshoe crabs, whelks, and other crabs. Loggerhead babies, however, are OMNIVORES.

Green Sea Turtles are HERBIVORES, meaning plant eaters, but their babies are OMNIVORES. As adults they eat: seagrasses, seaweed, and algae. It is this diet that makes the FAT that lies beneath their carapace green, – but not their shells. This is why they are referred to as…

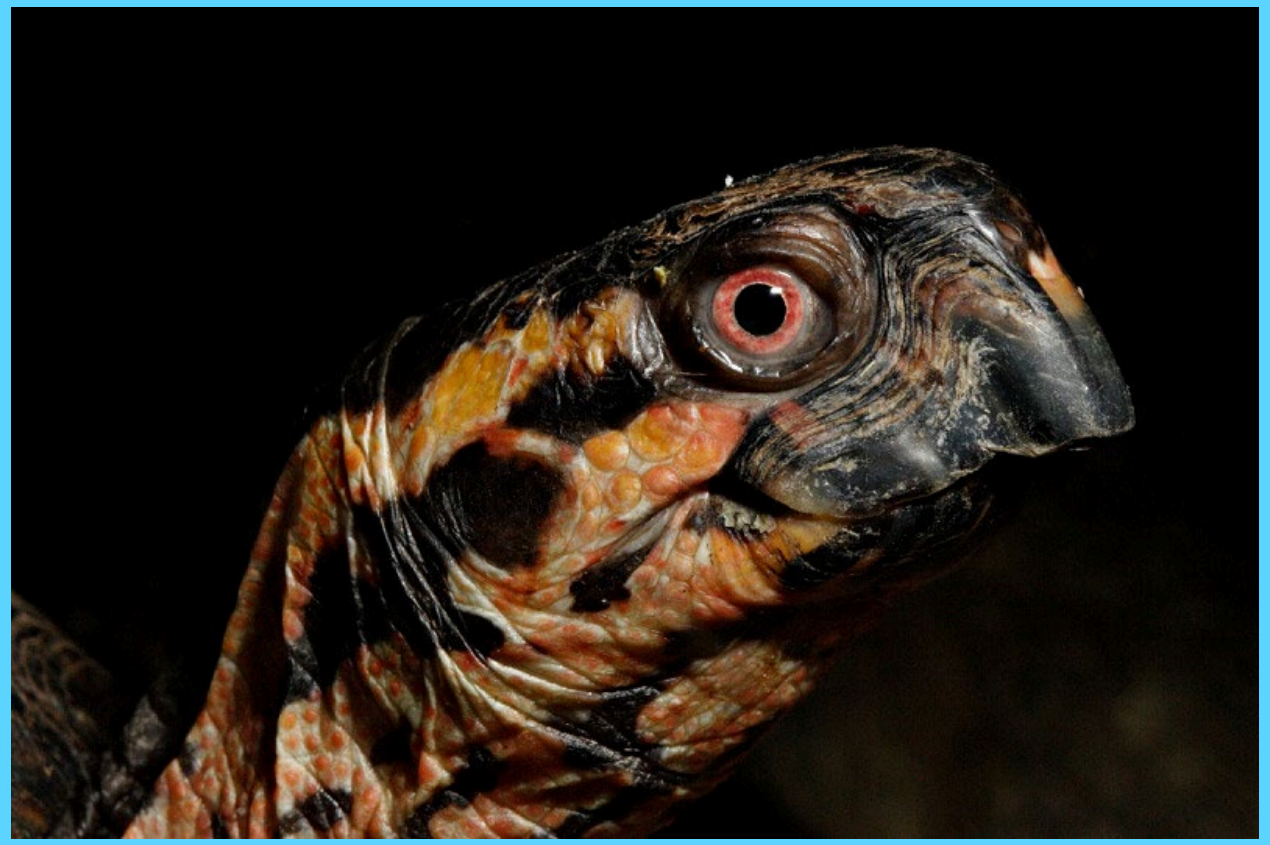
Green Sea Turtles

This Radiated Tortoise gets its name because of the rays radiating from a central circle in the middle of each scute on its back. The side scutes are smaller and they just give additional ray coloration. Radiated Tortoises are HERBIVORES. Their diet consists of mainly fruits, grasses, and succulent plants. A Radiated Tortoise can live to be about 40 to 50 years old. That is why it has so many rings on each scute.

This Hawksbill Sea Turtle is PRIMARILY A CARNIVORE.

This turtle gets its name, because of the sharp curving and cutting edge of its beak which resembles that of a hawk. Their favorite foods are sea sponges – which are animals. Their sharp beak helps them to dig into rock crevices for their food. They will also eat algae.

This Eastern Box Turtle is an Omnivore (eating both vegetation and animals). Its wide flat beak is good for cutting and smashing vegetation.



Eastern Box Turtle

The frequency of mating, laying eggs, and the quantity of eggs produced vary according to the particular species.

All turtles whether land or sea turtles, lay their eggs on land. Except for a few species, most female turtles dig a nest out of the ground, deposit their eggs, cover them, and then abandon them.

Most turtles are killed by other animals as eggs and hatchlings. Alligators, crocodiles, land mammals, and humans also kill turtles for food. Adult sea turtles are even attacked by sharks.

That's not the only reason some turtles are killed. According to scientists at Arizona University, fatalities ARE decreasing, but over the last 10 years, (as of 2023) thousands of sea turtles (encompassing about 65 countries) have been illegally killed per year by humans. They were killed for food, for medicine, sold as mementos, home décor, and jewelry.

If you need help with learning and reading God CAN help you.
Let us pray.

Just say, Lord Jesus the Christ,
I've made so many mistakes I must confess.
I repent of them now and turn from them.
I no longer want that mess.

Lord Jesus, I believe you are the Son of God
and believe in your resurrection.
I want to be a child of God
and receive your love and affection.

Lord Jesus the Christ, be my Savior.
Come into my heart.
Cleanse me now of all unrighteousness
and give me a brand-new start.

I ask for the baptism of the Holy Spirit
and the baptism by Holy fire too.
I WANT to be changed and to do the RIGHT things.
I need help from you.

Please help me to read, write, and do my math.
I want to start learning today.
I want my life to take a turn
and start in a whole new way.

Thank you Lord Jesus for helping me to learn.
I KNOW you can help make my ability,
greater than anyone ever imagined
and bring back my self-respect and dignity.

I ask this in the name of the Lord Jesus the Christ.
I say "Amen" and make it sure.
Now I'll start learning the RIGHT way.
I KNOW Lord Jesus, YOU are the door.

AMEN!

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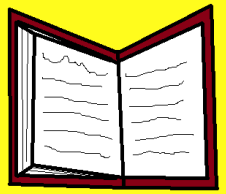

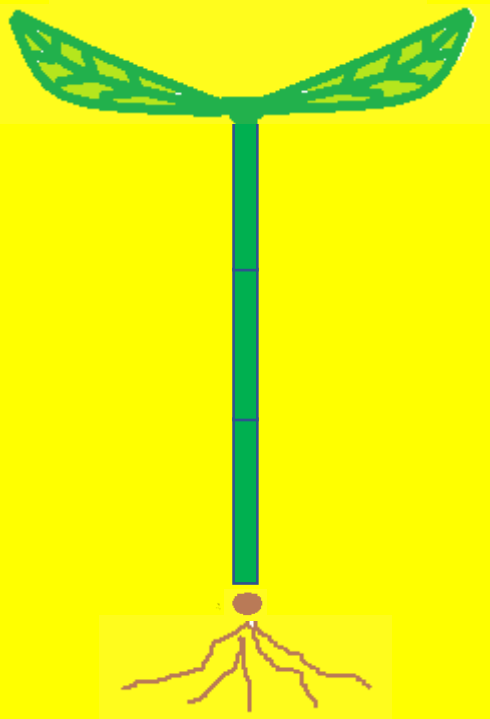

Isaiah 61:11

"11 For as the soil makes the sprout come up and a garden causes seeds to grow, so the Sovereign LORD will make righteousness and praise spring up before all nations." (NIV)